

GUILDWAY CONSTRUCTION STANDARDS

A Specification Manual

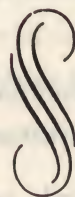
of

BUILDING TRADE STANDARDS and PRACTICES



GUILDWAY CONSTRUCTION STANDARDS

A Specification Manual



JOHNS-MANVILLE SALES CORPORATION

HOUSING GUILD DIVISION

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NEW YORK, N. Y.

INTRODUCTION

BUILDING TRADE STANDARDS

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GUILDWAY CONSTRUCTION STANDARDS

The Guildway Estimating System, of which the Guildway Construction Standards are a part, provides a logical solution to the following processes which are an essential part of each building transaction:

- (a) An understanding between the builder and the customer regarding the kind and quality of all material and workmanship which shall be used in the construction. This selection of specification is simplified by the use of the Building Trade Standards and Practices which have been developed in numbered paragraphs.
- (b) General Conditions which govern the methods of doing the work.
- (c) Preparation of Contract Documents, which include Agreement, General Conditions and Specifications.
- (d) Prices for materials and labor. To effect this the Estimating Handbook, Estimating Basis and Home Improvement Estimating Guide are provided.
- (e) Estimating Instructions. These are provided in the New Home Estimating Handbook and the Home Improvement Estimating Guide.
- (f) Base Prices. In order to compensate for material and labor price fluctuations, the System is provided with "Base Prices", with simplified instructions for local adjustment.

The Guildway Construction Standards consist of Building Trade Standards and Practices and are designed for use with the Guildway Contract Documents* consisting of:

Part I, Agreement for New Construction (Form 95-336A)

Agreement for Property Improvements (Form GS 537A)

Part II, General Conditions (Form 95-337A)

Part III, Specifications (Form 95-338) which conform with Local Code or other governing authority, F. H. A. "Minimum Construction Requirements" and "Property Standards, Part VI of Circular No. 2", for the affected State or District.

The following Estimating Bases and Specialized Estimating Forms, together with the Guildway Construction Standards, comprise the Housing Guild Estimating System:

J-M New Home Estimating Handbook

J-M New Home Estimating Basis

J-M Home Improvement Estimating Guide

Modernization Sketch Blank (Form 95-167)

Roofing Estimating (Form 95-168)

Siding Estimating (Form 95-169)

Estimating Guide Workout Sheet (Form 95-215)

New Home Workout Sheet (Form 95-300)

Construction Estimate (Form GE-5A)

*We assume no obligation for these forms being satisfactory under the laws of every state. We recommend they be reviewed and approved by local counsel.

HOW TO USE THE GUILDWAY CONSTRUCTION STANDARDS

The preliminary selection of materials and treatments is accomplished by checking preliminarily the various Trade Standards on the Specifications for Residential Construction (95-338).

The prices for material and labor are assembled by use of the Guild Estimating System or by obtaining Contractor's estimates. The Agreement (Form 95-336A) is then filled in with the prices, terms and conditions of sale. *(All plans and details bearing on the work must be identified, dated and listed on the Agreement.)*

The Agreement, preliminary Specifications and the General Conditions (Form 95-337A) are used for presenting the proposal. If no other options or changes are desired or requested by the Customer, the Agreement is signed by the Owner and the Contractor (if he is present), and returned to local Guild Headquarters.

The approved specification selections are then finally entered in the Specifications (Form 95-338) and these and the other Contract Documents are typed in the required number of copies and signed by the Owner and Contractor. (See facsimile documents in Appendix II of the Consumer Selling Manual.)

The required number of sets of Contract Documents are then assembled together with other necessary forms for submission to the financing agency, F. H. A. and other governing authorities.

* * * * *

The use of Guildway Construction Standards will prove beneficial to all of the parties concerned with the transaction because

THE OWNER is enabled to take an active part in the selection of the materials and their treatment.

THE SALESMAN is enabled to correctly interpret the Owner's or his Architect's wishes and transmit them to the Contractor without the dangers of omission or other errors.

THE CONTRACTOR is provided with definite descriptive information and can accurately estimate his costs.

THE ARCHITECT can more quickly assemble a specification and, as a consequence, devote a greater portion of his time to study of layout, design and treatment.

THE FINANCING AGENCIES can have more confidence when extending loans to an applicant who has taken these precautions to insure good construction, because their loan is better secured.

THE BUILDING MATERIAL DEALER can guide the prospective purchaser in the selection of quality materials which will give greater consumer satisfaction.

All of these and many other advantages of the Guildway System combine to make the transaction one by which everyone benefits and which at the same time provides a means which should result in THE BEST HOME DOLLAR VALUE AVAILABLE.

All references to "Article II, General Conditions" and "Outline Specifications" contained herein refers to General Conditions for Residential Construction—Form 95-337A and Specifications for Residential Construction—Form 95-338.

Facsimile copies of these will be found in Appendix II of the Consumer Selling Manual.

Notwithstanding anything to the contrary contained in this book, nothing set forth in this book shall be construed to prevent Johns-Manville from discontinuing any material named or discussed, changing the specifications, sizes, prices or quality of such materials or in any other way changing any of its products referred to herein without incurring liability of any kind to any one for such changes or eliminations.

JOHNS - MANVILLE HOUSING GUILD

BUILDING TRADE STANDARDS AND PRACTICES

1. - SURVEY

The owner shall furnish the Contractor with three copies of a survey prepared by a licensed Surveyor which shall give the lot lines and sufficient bench-marks and show the location of the proposed house and other buildings on the property.

The Contractor shall insert the location of any cesspool or septic tank, sewer, water, gas or underground electric service lines, indicate their depth and return one copy to the Owner.

2. - PERMITS

All permits and certificates of inspection necessary for the work shall be obtained and paid for by the Contractor who shall deliver them to the Owner at the time of final payment.

3. - CLEARING SITE

The Contractor shall clear the site including the site of driveway, sidewalks, garage or other proposed buildings to be excavated, of all brush, trees, boulders and other obstructions.

4. - LAYOUT

The Contractor shall be accountable for the correctness of the layout of his work in conformity with the survey and plans, and if for any reason an error in measurements, lines or levels results through the Contractor's neglect, the work shall be corrected without expense to the Owner.

5. - TREE REMOVAL

Trees located on the actual building site including drive and walks shall be cut down, stumps withdrawn and the entire tree parts be removed from the premises by the Contractor unless the Owner otherwise directs.

For any other trees not included in the original layout a fixed extra charge per tree to be paid by the Owner shall be agreed upon in advance.

6. - BOULDER REMOVAL

The burial or removal from the premises, as agreed, of any boulder located on the actual building site or uncovered during excavation (including drive and walks) shall be included in the Contractor's original estimate.

For any boulders adjacent to the building site (not included in the original layout) a fixed extra charge to be paid by the Owner shall be agreed upon in advance.

7. - TOP SOIL

Top soil shall be excavated and piled separately. After backfilling and rough grading are completed, the top soil at least 4" thick, shall be evenly distributed around the building to adequately cover the rough graded portions.

8. - BLASTING, PUMPING AND SHORING

Any undeterminable water, rock or quicksand condition, which may develop after excavation has begun, and which will necessitate pumping, blasting, pile driving or shoring shall cause the Contractor to cease work, notify Owner of the condition and submit a written proposal or estimate of the cost of this extra work and proceed only upon written approval by Owner.

9. - EXCAVATION (CELLAR)

Excavation shall extend to the depths to conform with plans with the sides and bottom reasonably square, plumb and level. Wherever possible, final excavated level shall be undisturbed soil. If, for any reason, fill-in is required to establish required levels, such areas shall be grouted, and when settled, shall be well-tamped to minimize settlement.

The excavated portion of any basement shall exceed the basement walls and any connected extensions such as areaways, cellar entrances, porches, etc. by at least 12" to permit erection of forms, dampproofing, installation of drainage or back plastering. In unexcavated portions under the building, there shall be sufficient clearance between bottom of floor joist and girders in accordance with local code requirements.

In the absence of bench-marks, the minimum depth of excavation shall be determined by lot inspection to ascertain the grading requirements necessary to conform with adjacent buildings. Unless otherwise specifically required by the Owner, the maximum first floor elevation on the side facing the street shall not exceed 30" above finished grade level.

10. - EXCAVATION (TRENCH)

Trench excavation shall extend to the dimensions shown on the plans, or as indicated by bench-marks plus such suitable clearance as may be required for any form work. Wherever possible to minimize settlement the trench bottom shall be undisturbed soil. The depth shall be in conformity with the plans or local building code, whichever is the deepest and in any event shall be below the frost line after the finish grading is completed.

11. - BACKFILL AND ROUGH GRADING

The backfill shall be well tamped and the balance of the excavated earth shall be spread to slope away from the foundation in a uniform manner to correspond with the existing or previous grade and after allowing approximately 3" for settlement, to levels 4" below the finished grade line. (No backfilling to be done until the foundation has been inspected and approved.)

12. - FINISH GRADING

The grading with top soil shall be done after the building (including walks and drives etc.) are completed. The top soil shall be graded, tamped and rolled to provide a suitable base for sodding, seeding or planting.

13. - SEEDING

After finish grading is completed, seeding with first quality grass seed shall be done by using a minimum of 1/2 lb. per 100 sq. ft. of surface. Before sowing seed, the soil shall be lightly raked, and after sowing it shall be rolled and sufficiently watered at daily intervals until new grass sprouts appear and are visible over the entire seeded area.

14. - LANDSCAPING AND PLANTING

A copy of the original survey shall be given by the Contractor to the Landscape Engineer who shall prepare an enlarged plot plan with landscape layout and a numbered schedule (to correspond with the plot layout) this to be approved in writing by the Owner and be included in the Contractor's estimate.

15. - CONCRETE (MACHINE OR HAND MIX)

All concrete under this classification shall be proportioned either 1:3:5 for ordinary construction or 1:2:4 where reinforced steel construction is involved in accordance with the architect's specification, the local code or Article II, General Conditions.

16. - CONCRETE (TRANSIT MIX)

Transit Mix Concrete shall be delivered according to the specified requirements prescribed by local code, the architect's specifications or Article II in strengths of 2000 lb., 2500 lb., or 3000 lb.

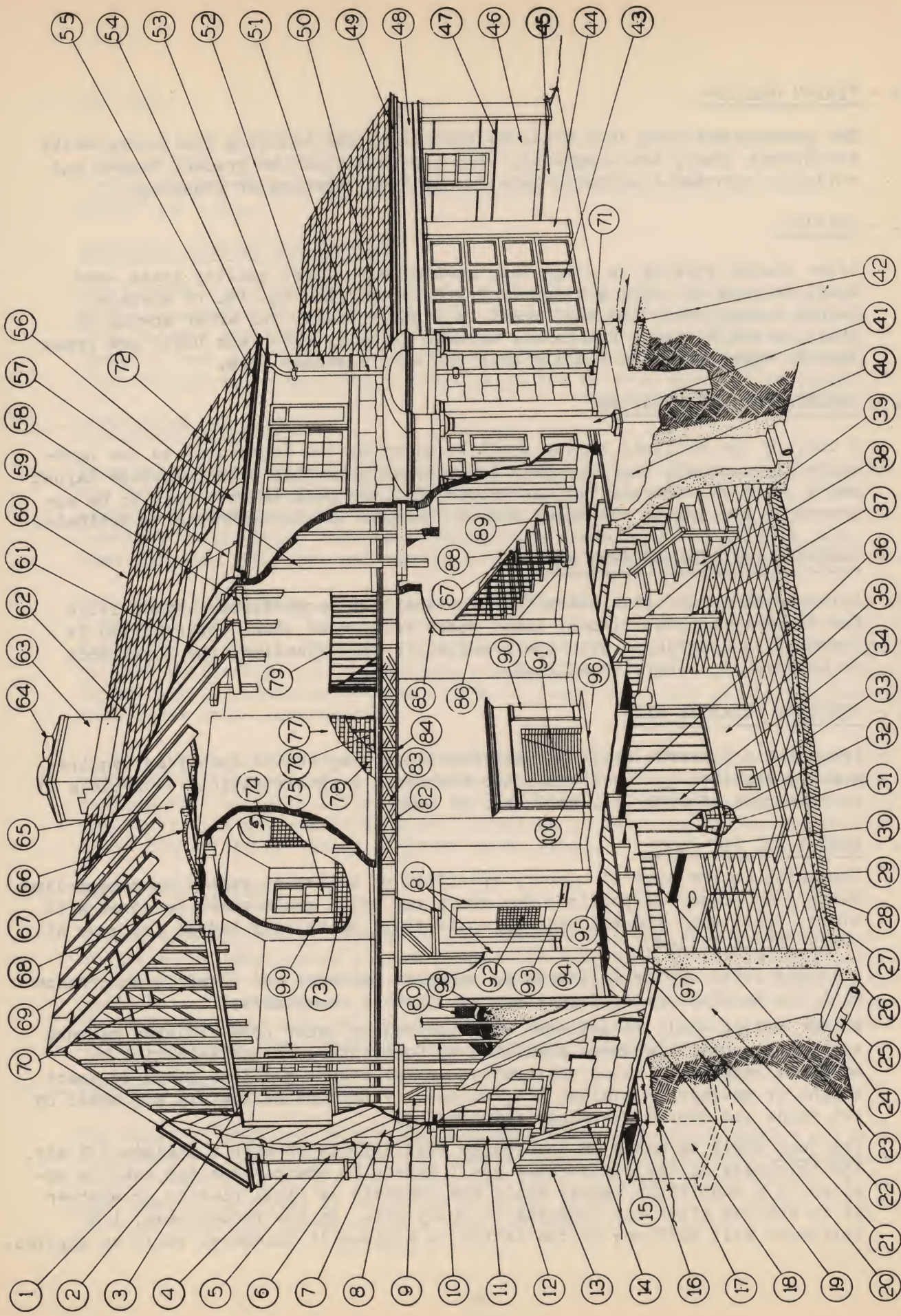
17. - MORTAR AND TOP COAT

Depending on the type of masonry specified or selected, cement or cement-lime mortar, in proper proportions for above and below grade shall be mixed with clean, sharp sand and all masonry units shall be solidly bedded and have all cross joints filled.

Patented brick mortar delivered in unbroken packages and mixed in accordance with the Manufacturer's directions is likewise acceptable.

Mortar colors shall be selected and approved by Owner from finished masonry samples or color specimens submitted by Contractor. After selection to maintain reasonable color uniformity, mortar colors shall be mixed to exact weight or measure in similar proportions. A portion of the dry mix shall be set aside and stored for final pointing up.

Top Coat shall be mixed in accordance with Article II with a minimum 1:3 mix. The thickness of the finish coat shall depend on whether the top coat is applied in a monolithic manner while the concrete is still plastic or whether it is applied after the concrete is fully set. In the former case, 1/2" thickness will suffice; in the latter, a minimum 1" thickness shall be applied.



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18. - CONCRETE FOOTINGS

Wall, pier, column or other load-bearing footings shall extend below frost line, be properly designed with sufficient area to transmit the imposed loadings at safe soil bearing stresses to the ground; shall be of concrete as specified. Std. No. 15, of a size and placed according to the drawing or as required by local code or other governing authority. In general all footings shall be set in forms which shall be level, square and true and in the absence of any other specific code dimensions shall have a minimum projection of at least 4" on each side of the wall.

Chimney Footings: For one story houses, chimney footings shall be at least 8" thick and shall extend 4" on either side of the chimney. Chimney footings for dwellings over one story in height shall have a minimum thickness of 12" and shall extend 6" on all sides of the chimney.

19. - CONCRETE FOUNDATION WALLS

Concrete of proper mix and consistency, according to mix selected by Owner shall be poured in the wall forms in a continuous and evenly distributed manner in order to retain the monolithic advantages and yet not distort the forms. Concrete, when placed shall be "puddled" or "spaded" in order to prevent voids, air bubbles or "honey comb" effects in the wall surface.

Anchor bolts, depending on sill or wall plate lengths shall be installed at proper locations obtained from carpenter foreman before concrete is set.
(Refer to Std. No. 69.)

After the forms have been removed, projecting ends of tie wires shall be neatly removed and any imperfections smoothed and neatly pointed up with cement mortar.

20. - CONCRETE BLOCK FOUNDATION WALLS

The Contractor (after adequate footings have been placed and set) shall construct the foundation walls, piers and areaways of Concrete Block (See Article II) of proper width and height as shown on the plans or as required by code or other governing authority. The block shall be laid up with full width 1:3:10% cement mortar joints (not over 3/4" thick) on all webs with cross joints grouted solid. When sill height has been reached all window and other opening frames shall be set plumb and level in their proper location and suitably anchored with metal ties or mortar while the wall is being built.

After anchor bolt locations have been determined, bolts shall be installed (Refer to Std. No. 69). All other open core holes in the top course shall be filled with concrete to provide a solid bearing surface to properly bed the wall sills and plates.

Corners and Jambs: All corners or jambs shall be neatly built with the appropriate fractional block sizes required to effect a uniform bond with the balance of the wall; i.e., vertical joints shall "line up."

20. - CONCRETE BLOCK FOUNDATION WALLS (CONT'D)

Finish Treatment: On all exposed Concrete Block Wall surfaces except those which are plastered, the joints shall be neatly pointed with cement mortar either standard or colored as selected.

21. - CONCRETE FILL FOR BLOCK WALLS

Where required by local code for the entire wall below grade or at such locations in the ordinary block wall where concentrated loads occur; after Concrete Block Walls are laid two courses high and for each two courses following, concrete fill (at least 1:3:5 or 2000 lb. mix) shall be used to fill the hollow spaces within the blocks to form an adequate load bearing area.

22. - RUBBLE STONE FOUNDATION WALLS

The Contractor shall obtain the Owner's approval on the kind of stone and mortar joint that shall be used prior to starting of any stone work.

The Contractor shall (after adequate concrete footings have been placed and set) construct stone walls of sizes shown on plans, using the largest stones for the first courses.

Unless otherwise shown on plan, stone shall be laid with the largest flat surface embedded in mortar, with all joints grouted solid with cement mortar, properly bonded and neatly pointed. Exposed wall surfaces shall be kept as straight as possible.

Anchor Bolts for plates and sills shall be properly located and installed in accordance with Std. No. 69.

23. - DRAINAGE

A trench (minimum width 8") shall extend around entire foundation wall footings, also areaways, porch walls, exterior masonry slabs, steps, walks, driveways, garage floors, etc. and be gradually pitched to a common low drainage or seepage point on the premises. Where local code permits, it shall be connected with the storm or sanitary sewer system.

Drainage is effected by installing in the trench either of the following treatments:

- a. Blind or "French" Drains: Install 1-1/2" crushed stone or its equivalent in the drainage trench to a minimum depth of 10" and cover with a 6" thick layer of 1/4" crushed stone, gravel, coarse sand or cinders.
- b. Drain Tile: In the drainage trench install by laying end to end 4" porous round or "U"-shaped clay or cement tile (laid with open side down), cover the open joints with strips of asphalt or tarred felt and then fill the balance of the trench space with crushed stone, gravel, coarse sand or cinders sufficiently to form a minimum 3" thick layer of coarse fill over the top of the drain tile.

24. - DAMPPROOFING

Depending on location, ground conditions, and depth of excavation, varying precautions to effect an all year dry basement are necessary.

The Contractor shall determine which type of treatment listed below is required to avoid dampness or water conditions, include them in his estimate, and agree in writing to correct any water conditions which may develop in the basement within one year after completion without charge to the Owner.

For Foundation Walls and Floors

- a. Integrally waterproofed cement concrete for walls, floor slab and top coat.
- b. Integrally waterproofed (1:2½ mix) floor top coat only.
- c. Integrally waterproofed (1:3:10% Hydrated Lime Mix) cement plaster for walls only.
- d. Membrane waterproofing (J-M specification) including one layer of 15 lb. J-M Asbestos Waterproofing Felt, J-M Concrete Primer and two Hot Moppings of J-M Asphalt Waterproofing Cement.
- e. Membrane waterproofing (J-M specification) similar to "d." except one layer of J-M Asphalt Saturated Fabric shall be applied instead of the J-M 15 lb. Asbestos Felt.
- f. J-M Concrete Primer applied cold and J-M Asphalt Waterproofing cement applied "hot mop" (one coat of each) for walls only.
- g. J-M Asbestos Mastic Dampproofing Cement applied cold with plasterer's trowel approximately 1/8" thick to exterior wall surfaces below grade.

25. - CINDER FILL

Earth bed to receive cinder fill shall be evenly tamped to a true, hard surface 4" below level of the tamped cinder fill. The cinders shall be evenly spread in three 2" layers to a thickness of 6" and each layer shall be tamped so that the finished thickness will measure 4".

Under basement floors, cinder fill shall be connected to drainage trench by inserting drain tile, two lengths on each wall approximately 10 ft. apart, through the concrete wall footings. Wherever possible, all cinder fill for slabs, side walks, driveways, etc. should be provided with drainage outlets.

26. - EXPANSION JOINTS

Where expansion joints are shown, they shall extend through the full thickness of the concrete and shall be a pre-formed resilient expansion joint filler, of asphalt or pre-compressed cork.

27. - REINFORCEMENT

Where selected, required by code. or shown on plans, supported concrete floors shall be reinforced with J-M CC 1010 Welded Wire Reinforcement which shall be laid on base and raised approximately 1/2" to 3/4" to permit embedment in concrete.

For unsupported concrete floors, the gauge and spacing of J-M Welded Wire Reinforcement shall be adequate to meet such sectional area requirements as may be determined by the strength and thickness of concrete slab, length of span, load bearing factors, etc. and shall provide sufficient reinforcement to comply with plans, local code and other governing authorities.

Steel Rod Reinforcement: Where shown on plan or required by code, steel reinforcement rods in accordance with Article II either round or square, plain or deformed, of the diameter, weight and in the required lengths shall be installed in walls, footings, slabs, piers, and chimneys and be spaced and located as shown on plan and also to conform with local code and any other governing authority.

28. - CONCRETE FLOORS (GENERAL CONDITIONS)

Mix: Mix for concrete and top coat for floor slabs, including all exterior and interior flat work shall conform with the proportions described in Article II which consist of:

| <u>For Concrete</u> | | <u>For Top Coat</u> | |
|---------------------|---------|---------------------|-------------|
| Cement | 1 part | Cement | 1 part |
| Sand | 3 parts | Coarse Sand or | |
| Stone | 5 parts | Stone Screenings | 2-1/2 parts |

Water ratio shall not be over 6.50 or 6-1/2 gals. per bag cement; the amount of water to be decreased if sand or stone is moist so that the slump will not exceed 3".

Installation: Concrete floors, wherever possible, shall be installed monolithically; i.e. the top coat shall be applied within two hours after placement of the base concrete.

Top Coat Thickness: The combined thickness of slab and top coat shall be 4" (top coat to be minimum 1/2" thick). Where construction conditions do not permit immediate application of the top coat, it shall be increased to 1" thickness.

Curing: All exposed concrete floors, after the finish coat is sufficiently set to prevent marring, shall be cured by covering with a layer of sand, hay or burlap and this shall be wetted at frequent intervals for a period of 96 hours.

Undisturbed Soil: Where concrete slab is laid on earth, full precautions shall be exercised to prevent disturbing the base soil. If some undisturbed soil areas are unavoidable on account of soil line trenches, etc. such sections shall be filled in, grouted and well tamped.

28. - CONCRETE FLOORS (GENERAL CONDITIONS CONTINUED)

Free or Standing Water: Any free or standing water shall be drained before any concrete is placed.

Reinforcement: On filled-in soil, concrete slabs, floors, platforms, side walks or driveways shall be reinforced (Refer to Std. No. 27).

Concrete Floors with Cinder Fill: Undisturbed or well tamped soil shall be graded to a point 8" below top of finished floor. Cinders shall be installed to conform to Std. No. 25. Concrete floor shall be installed in accordance with the foregoing directions to a combined thickness of 4".

29. - CONCRETE FLOORS OVER EARTH FILL

After retaining walls or curbs have been constructed to proper size and depth as shown on plan (or at least 6" below normal frost line) earth fill shall be installed in layers not over 6" thick, each layer to be well tamped and the final tamped layer shall be leveled at a point 4" below the top of retaining wall, curb or footing and shall be covered with concrete base and be immediately finished with a top coat rodged, floated and troweled evenly to the pitch shown on plan. Over filled-in ground, J-M Welded Wire Steel Reinforcement shall be inserted in accordance with manufacturer's instructions. (Refer to Std. No. 27.)

Scoring or jointing shall be laid out according to size indicated on plan and smoothly cut through the top coat and concrete base.

30. - CONCRETE FLOORS OVER WOOD OR STEEL JOISTS

J-M Steeltex Floor Lath (furnished in rolls 4' wide by 125' long) shall be applied in continuous lengths where possible directly over wood or steel joists (spaced not more than 20" c.c.) stretched and secured with adequate staples or "off-set" head nails on wood joists or J-M Steeltex "sharp-nose clips" for steel joists. Concrete, to required thickness and finish shall be installed in entire conformity with Std. No. 28.

31. - MONOLITHIC FLOORS

Concrete base shall be installed in accordance with Std. No. 28 to a thickness of 4" and sufficiently floated and troweled to depress the coarse aggregates to enable the fine aggregates to receive an even trowel or float finish. In this construction separate top coat is omitted.

32. - CONCRETE DRIVEWAYS AND RIBBONS

Concrete driveways or ribbons shall be installed where described on plot plan or selected by Owner, similarly to the methods described in Std. No. 31.

33. - CONCRETE SIDEWALKS

Depending on sizes shown on plan, or widths and lengths selected by Owner, walks shall be installed by Contractor as follows:

33. - CONCRETE SIDEWALKS (CONTINUED)

Excavate required areas, following the pitch of grade lines, at least 4" wider than finished width of walks to allow for forms and drainage, to a depth of 7" at the center and 10" at both sides to form a reinforcing edge. These edges shall be not less than 6" wide for walks.

Forms shall be accurately set, well braced and anchored with stakes not over 48" c.c. on straight runs, and not over 18" c.c. on radii.

Depending on whether a "crown" or pitch is required or shown on plans will determine whether forms shall be placed at common level and top coat rodded with concave shaped rod, or whether forms shall be set at different levels and top coat pitched to shed water.

Forms shall be set true and held in alignment to correspond with layout and be kept from spreading or narrowing by yokes or ties.

A bed of well-tamped cinders (at least 3" thick after tamping) shall be installed in accordance with Std. No. 25.

Concrete base shall be placed in form and immediately finished with a top coat in accordance with Std. No. 28.

Form Removal: After concrete has set (at least 96 hours), forms shall be carefully removed and form spaces neatly filled and tamped to prevent damage to edges. Excess soil to be evenly distributed or removed depending on finished grade.

Finishing: Smooth-trowel, trowel-float or wood-float finish, depending on Owner's selection, shall be uniform in texture, neatly jointed with side lines, "edged" and cross joints spaced to center on expansion joints where they occur.

Protection: During laying, concrete shall be adequately protected from storm, dust, rains or freezing.

34. - FLAGSTONE OR SLATE WALKS

Broken flagstone or slate slab walks shall be laid with broken joints and edges in alignment according to widths and lengths selected by Owner in either of the following methods:

a. Laid on well-tamped earth.

b. Laid in 3" concrete base before it has set (Refer to Std. No. 30). After concrete has set, joints between flagstones shall be neatly pointed with 1:2½ cement mortar.

35. - CONCRETE CURBS

Curbs shall be installed by excavating a trench 12" wide and 12" below finished grade on lowest side. Trench forms spaced 4" apart at top and tapering to 4-3/4" at bottom, shall be accurately set and braced to conform with bench-marks on survey.

Before placing concrete, inner side of form which will be exposed shall be coated with top coat.

Concrete shall be placed in forms and finished with 1/2" top coat (Refer to Std. No. 28).

36. - AREAWAYS AND CELLAR ENTRANCES (CONCRETE)

General Conditions: Areaways and cellar entrances shall be constructed to the size shown on plan to a depth 6" below the frost line. Where possible, they shall be constructed as an integral part of the foundation. When construction conditions prevent this practice, the foundation wall opening shall be provided with such necessary bonding provisions as may be required to assure a water-tight bond between the areaway and the foundation.

Minimum thickness of wall shall be 6" and be finished with a concrete, brick or stone curb as selected. Areaway, where shown on plan, shall be fitted with suitable iron gratings or grills embedded in slots formed in the masonry to permit easy removal for cleaning purposes.

Bottom of areaways shall be a minimum 3" thick concrete slab (for mix, refer to Std. No. 28) and shall be provided with a drain. The top of the area bottom shall be at least 1" below the bottom of the window sill.

Cellar Steps: Steps, (minimum 9" tread, 6" rise) to be installed and finished as described in Standard No. 40)

Anchor Bolts: Six 1/2" x 8" anchor bolts shall be embedded in cellar entrance cheek walls and project 2-1/2" to firmly secure 2"x 4" single sills used for attaching the slanting bulkhead side and batten doors. (Refer to Standard No. 65)

Note: For drain and bell trap, refer to Standard No. 283.

37. - AREAWAYS AND CELLAR ENTRANCES (CONCRETE BLOCK)

These shall be constructed to the size shown on plan and according to the General Conditions described in Standard No. 36, except that walls shall be constructed with Concrete Block, 8" thick, laid as described in Standard No. 20.

38. - AREAWAYS AND CELLAR ENTRANCES (BRICK)

These shall be constructed to the size shown on plan and according to the General Conditions described in Standard No. 36, except that walls shall be constructed with 8" Common Brick as described in Standard No. 41.

39. - AREAWAYS AND CELLAR ENTRANCES (RUBBLE STONE)

These shall be constructed to the size shown on plan and according to the General Conditions in Std. No. 36, except that walls shall be constructed with 12" Rubble Stone as described in Std. No. 22.

40. - CONCRETE STEPS

Concrete steps, minimum 1:3:5 mix (See Article II) shall be constructed with a J-M Welded Wire Type CC 1010 Reinforced slab, 4" thick at the shallowest point, shall be poured monolithically in a substantially built wood form. Before pouring concrete, form surfaces including step risers which shall slant inward approximately 1-1/4" to provide toe room shall be coated with a top coat to form the finished riser and cheek surface. The "tread" surface shall be 1" thick of the same mortar.

Riser forms shall be inserted progressively, as concrete is placed, to fit into previously leveled and braced inverted false string boards. The top edges of the step shall be neatly rounded to prevent shipping.

If "nosing" is shown on plan, steel reinforcement shall be placed into the tread surface and project at least 3/4" past riser edge to support the "nosing."

41. - BRICK WORK SOLID (COMMON AND FACE)

General Conditions: The Contractor (after adequate footings have been placed and set) shall construct walls, piers, areaways, bulkheads, chimneys, ash pits, etc. plumb and square with hard-burned brick - Refer to Article II (the brick shall be dampened before laying) to proper widths, lengths and heights as shown on plans.

Bonds - Common Brick: Unless otherwise specified on plans, "running bond" with a single course of "headers" every fifth course on 8" walls or a double or bonded header course on 12" or 16" walls shall be observed. In districts susceptible to earthquakes, brick work shall be reinforced with steel rods of the diameter, shape and spacing to conform with local governing authorities.

Face Brick: The Contractor shall submit to Owner sample face brick in order to obtain approval of color and texture, mortar color, type and size of joints. Face brick shall be carefully selected for uniformity in size, shape, true and square edges, and be laid level, plumb and square, with uniform bed and cross joints.

Mortar for Brickwork Below Grade: Mortar shall be mixed one part Portland Cement, three parts sand and 10% (of cement volume) of Hydrated Lime.

Mortar for Brickwork Above Grade: Mortar shall be mixed one part cement, one part Hydrated Lime (by volume) and six parts sand.

41. - BRICK WORK SOLID (COMMON AND FACE)

Mortar Color: The shade of color and type of pigment will determine the number of pounds of color per bag of cement to be added. The cement, sand, and lime ratios shall remain the same as outlined above.

Bonds - Face Brick: Depending on surface bond selected, face brick shall be bonded to supporting masonry with headers, clip-courses or metal ties or mortar grout if Steeltex for Brick Veneer is used; metal ties if wood or J-M Insulating Board is used.

Joint Sizes and Finish: For either common or face brick, joint sizes and type of finish, whether "understruck" "weatherstruck", "flush", "raked" or tooled, shall be as shown on plan or selected by Owner.

Painting Common Brick Work: Brick work shall be wire brushed to remove any loose mortar and be neatly pointed with cement mortar which shall be allowed to thoroughly dry before paint as selected is applied.

Cleaning Down: All exposed surfaces of finished brick work shall (unless cold water paint or prepared oil paint is to be applied) after work is completed, be washed down with a diluted solution of muriatic acid (1 part acid, 10 parts water) to remove mortar stains and projecting fragments, rinsed with clear water and neatly pointed where necessary.

42. - BRICK VENEER OVER STEELTEX

General Conditions: Foundation walls shall be at least 10" wide up to grade line with a 4" off-set on the exterior to accommodate the brick veneer wall according to plan. Before any brick work is begun the color and texture of brick, whether common or face also color size and type of mortar joint and brick bond shall be selected and approved. In addition, any difference in plan details such as soldier courses window and door sills and lintels shall be clearly marked on all of the plans at the time of selection.

Brick shall be carefully selected to avoid under-size, warped, over-burnt or soft brick, and for sharp corners and edges and be neatly laid in cement mortar as described in Std. No. 41.

Application of Steeltex: Depending on local code, J-M Steeltex for Brick or Stone Veneer shall be applied directly over studs in accordance with the manufacturer's directions (otherwise it may be applied over wood sheathing.)

Laying Brick on Steeltex: Brick shall be laid with an approximate space of 1" between Steeltex and Brick and as each course is laid, this space shall be grouted solid with cement mortar (Refer to Std. No. 41.)

43. - BRICK VENEER OVER J-M INSULATING BOARD SHEATHING 25/32" THICK

The General Conditions outlined in Std. Nos. 41 and 42 shall be observed except that the 1" space between the brick and sheathing shall remain open. In addition, where brick are laid next to J-M Insulating Board Sheathing, a 15 lb. layer of J-M Asphalt or Asbestos Slater's Felt shall be applied with lapped horizontal and vertical joints and secured with nails and caps spaced not over 6" c.c. on all edges and 16" c.c. on intermediate supports.

43. - BRICK VENEER OVER J-M INSULATING BOARD SHEATHING 25/32" THICK (CONTINUED)

Metal Ties: Galvanized metal ties shall be nailed at each alternate stud and inserted between the brick at each fifth course.

44. - BRICK VENEER OVER WOOD SHEATHING

The General Conditions outlined in Std. Nos. 41 and 43 shall be observed, except that instead of J-M Insulating Board for Sheathing, horizontal or diagonal wood sheathing as selected or noted on plan shall be applied over the studs.

45. - STONE VENEER OVER STEELTEX

General Conditions: Foundation walls shall be at least 12" wide up to grade line with a 4" off-set on the exterior to accommodate the stone veneer wall according to plan. Before any stone work is begun, the kind and type of stone work including bond and mortar joint shall be selected and approved. In addition, any differences from plan details, such as window and door sills and lintels shall be clearly marked on all of the plans at the time of selection.

Application of Steeltex: Depending on local code, J-M Steeltex for Stone Veneer shall be applied directly over studs in accordance with the manufacturer's directions (otherwise it may be applied over wood sheathing).

Setting Stone on Steeltex: Stone shall be carefully selected and be neatly laid in cement mortar with an approximate space of 1" between Steeltex and stone and as each course is laid, this space shall be grouted solid with cement mortar.

46. - STONE VENEER OVER J-M INSULATING BOARD SHEATHING 25/32" THICK

The General Conditions outlined in Std. No. 45 shall be observed except that the 1" space between the stone and sheathing shall remain open, and in addition, where stone is laid next to J-M Insulating Board Sheathing, a 15 lb. layer of J-M Asphalt or Asbestos Slater's Felt shall be applied with lapped horizontal and vertical joints and secured with nails and caps spaced not over 6" c.c. on all edges and 16" c.c. on intermediate supports.

Metal Ties: Galvanized metal ties shall be nailed at each alternate stud and inserted between the stone at each course.

47. - STONE VENEER OVER WOOD SHEATHING

The General Conditions outlined in Std. Nos. 45 and 46 shall be observed, except that instead of J-M Insulating Board for sheathing, horizontal or diagonal wood sheathing as selected or noted on plan shall be applied over the studs.

48. - BRICK PIERS

After adequate concrete footings (in accordance with Std. No. 18) have been placed and set, brick piers shall be built to sizes shown on plan or required by code if the latter exceeds the former, with common or face brick as selected, laid with uniform mortar bed and cross joints in 1:3:10% cement-lime mortar. All joints shall be grouted as each course is laid. Each course shall be "plumbed" and leveled to assure correct alignment.

Selection of Brick and Joint Sizes: The conditions in Std. No. 41 relating to brick approval joint sizes and mortar color shall apply.

48. - BRICK PIERS (CONTINUED)

Bond Stones: To effect greater rigidity properly sized and dressed bond stones at least 3" thick shall be used to bond the pier at approximately every 10 courses and terminate with a bond stone.

49. - CHIMNEYS

After adequate footings (Refer to Std. No. 18) have been placed and set, chimneys shall be constructed of either common or face brick, concrete, concrete block or stone to sizes shown on plans or to conform with local code or other governing authorities and be lined throughout with fire clay tile flue lining, with joints and sides grouted solid. Where more than two flues occur, a brick withes shall separate each group of two flues their entire length. Where two flues are grouped without withes, the joints of the flue lining shall be staggered.

Thimbles: Thimbles of appropriate diameters and lengths shall be neatly connected with the flues and all joints grouted with cement mortar.

Fireplaces: The Contractor shall construct fireplace to dimensions and of facing material indicated on plan. All fireplaces shall be constructed with an adjustable dome-damper, ash dump, ash pit and clean-out door. The fire chamber shall be faced with fire brick, laid flat in fire-clay mortar. A substantial steel angle shall be installed to support the masonry over the fireplace opening unless a masonry arch is shown on the plans.

Hearth: Fireplace hearths shall be constructed with supporting masonry arch or reinforced concrete slab as indicated on plan. Hearth surface shall be finished with either quarry tile, broken flagstone, face brick or colored cement.

Fireplace Flues: The ratio of flue size to fireplace opening shall not exceed 1 to 10.

Mantel: Masonry mantel construction shall conform with sample of material and joint and color treatment submitted by Contractor and approved by Owner. For Wood Mantels, refer to Std. No. 165.

Clean-out Doors: All ash pit masonry bases shall be equipped with a cast iron clean-out door, secured with metal ties into the masonry and neatly pointed with cement mortar.

Reinforcement: In areas susceptible to earthquakes where F.H.A. Minimum Construction Requirements or local code requires chimney reinforcement, refer to Std. No. 27.

50. - EXTERIOR CHIMNEY FINISHES

All exposed portions of chimneys shall be finished to correspond with the texture, joint treatment and color of the exterior masonry treatment selected for the balance of the house.

51. - CHIMNEY CAPS

Depending on plan or specification, chimneys shall be finished with either brick, cut stone or pre-cast concrete chimney caps. Caps shall be set level and the spaces between the projecting fire clay tile flue lining and the cap grouted solidly and pointed to shed water.

52. - BRICK: SOLDIER COURSES

Brick, carefully selected and gauged for size, shall be laid vertically to a level top line with the truest narrow face exposed, with uniform cross joints, and each brick "plumbed" and leveled to assure its correct alignment.

53. - BRICK: ROWLOCK COURSES

Brick, carefully selected and gauged for size, shall be laid on edge horizontally to a level top line with the truest "head" and exposed, with uniform cross joints, and each brick shall be "plumbed" and leveled to assure correct alignment.

54. - BRICK FLOORS

Brick for floors shall be carefully selected for size and true faces and edges, after a border, one brick wide, has been laid on edge "rowlock" fashion, the remaining field shall be filled in with brick laid on edge or flat, on a carefully leveled and rodded clean, sharp sand base, not less than 1/2" thick on a 3" concrete slab, and all joints shall be filled with cement mortar and pointed "flush."

55. - BRICK STEPS

Brick steps of gauged, uniform size brick, shall be constructed level, square and true over a minimum 4" thick bed of 1:2:4 mix concrete over unexcavated areas, or of the same thickness with J-M Welded Wire, or equal, reinforcing if erected over excavated areas.

Brick, consisting of appropriate "stretcher", and "header" courses, shall form the riser. The "tread" pitched 1/8" shall consist of a "header" or "rowlock" course, depending on height of each riser and shall project over the underneath courses at least 3/4". All horizontal surface joints shall be grouted solid and pointed flush. Balance of joints to conform with plan notes or Owner's choice.

Cheek Walls and Bulkheads: Cheek Walls shall be built co-incidentally with the steps. If bulkheads are shown, they shall be thoroughly set before steps are built. The finish on bulkheads, including caps, shall be applied after the steps are completed.

56. - BRICK FILL (FIRE STOPS)

Where required by local code, ordinances, specifications or zoning regulations, brick shall be laid flat in cement mortar between studs on exterior or parting walls, each course to be solidly grouted to prevent any voids between the surrounding wood members and the brick. Unless otherwise specified 3 courses shall be laid for 8" joists, 4 for 10" joists, and 5 for 12" joists.

57. - COPING

Precast Concrete Coping: Precast coping of size as shown on plan shall be carefully bedded, square, level and true in a full-width bed of 1:2 cement mortar. "Shimmed" with wedges until cement has set sufficiently to permit wedge removal without mortar distortion. Cross joints shall be grouted solid and after mortar is "stiff", both bed and cross joints shall be neatly pointed.

57. - COPING (CONTINUED)

Stone and Terra Cotta Coping: Stone or terra cotta coping shall be set as described for Precast Concrete Coping. For coping finish, type and kind of stone or color of terra cotta desired, refer to Outline Specification.

Concrete Coping Cast in Place: Level, parallel forms, separated to uniform width, shall be set and braced. Top of masonry wall shall be brushed to remove loose mortar and other debris and sprinkled with water to insure bond.

On sides which will be exposed, forms shall be coated with 1/2" top coat, mixed 1:2½ before concrete (minimum mix 1:3:5) is poured.

Top coat shall be at least 1/2" thick. After concrete has set, and forms taken down, top, side and underside of projecting surfaces shall be rubbed down with carborundum stone and water and pointed up to neatly fill all blemishes and leave edges square and true.

58. - ARCHES, LINTELS AND SILLS

Depending on the plan or Owner's selection, arches or lintels and sills of either brick, stone, terra cotta or precast concrete shall be installed with the necessary steel angles or channels to support the masonry over the openings. Sizes and weights of steel members shall be governed by the span, load and local building code requirements.

59. - CUT STONE, TERRA COTTA AND PRECAST CONCRETE

Masonry units shall be free of surface defects, stains and discolorations other than those inherent in the material. All edges shall be sharp, true and square. Masonry units shall be sized to dimensions given on plan and be sufficiently true to permit uniform bed joints.

Masonry units shall be set plumb, square and level in non-staining cement mortar, "shimmed" with wooden wedges until mortar has set, joints raked out and after completion, wedges shall be removed and masonry wire brushed to remove any loose mortar and neatly pointed with mortar of color and with type of joint as selected by Owner.

60. - WOOD FORMS FOR MASONRY ARCHES

Forms for arches shall be constructed of two wood members 2" thick and of appropriate depth, "bandsawed" to the required radius as shown on plan, spaced to full wall thickness and connected with 1" x 2" wood ties spaced approximately 3" c.c. The "feather edge" ends of the supports shall rest on the masonry where the arch "skew-back" begins and be suitably braced with upright members from the sill below to support the form in a true level position until the masonry has set.

61. - STUCCO

Scratch Coat: A Scratch Coat of 1:3:10% cement-lime mortar shall be applied to stucco base, which may be either J-M Steeltex for Stucco or J-M 38-16 Steeltex for Stucco, (which shall be applied directly over studs in accordance with manufacturer's directions), hollow tile, concrete block, monolithic concrete, common brick or stucco mesh applied in accordance with local code or other governing authority, and horizontally scored immediately after application to provide mechanical bond for brown coat.

61. - STUCCO (CONTINUED)

Brown Coat: A Brown Coat 1/2" thick of 1:3:10% cement-lime mortar shall be applied after Scratch Coat is set, and be carefully rodded with all corners plumb and surfaces evenly floated with wood float and lightly scored.

Stucco Finish: Stucco Finish shall be applied by making a thinned cement wash, tinted to the color of the finish selected. This wash shall be applied progressively to dampen the dry Brown Coat immediately before the finish stucco (1:3:10% cement-lime mix) is applied and shall only cover such area as may be stuccoed within the next ten minutes. The stucco finish shall be applied with uniform texture and color and fully cover all surfaces in a manner to completely eliminate all traces of the brown mortar and avoid all joint or lap marks.

Color and Texture: Depending on whether dark or light finish is desired, standard grey or white Portland cement will be required for the finish coat. Before proceeding with the finish coat, the Contractor shall submit to the Owner a sample of stucco showing his interpretation of the color and texture as selected.

Finish Treatment: After application all window, door and frames, soffits, cornices, water table, coping, etc., shall be carefully cleaned to remove all traces of stucco finish. Any damaged portions, stains or scars which may develop during construction to completion shall be carefully repaired by using a dry portion of the original stucco finish mix which shall be set aside and carefully stored for this purpose.

62. - SCAFFOLDING (STRUCTURAL)

Where required for exterior or interior work, safe, adequately braced scaffolding shall be erected and dismantled by the Contractor. The materials required, as well as the necessary labor for erecting and dismantling, shall be the responsibility of the sub-contractor of the craft affected.

63. - FORMS FOR FOOTINGS

Footing forms shall be accurately set to provide the specified projection on either side of the walls or piers as shown on the plan. (Refer to Standard No. 18)

The form members shall be rigidly braced to assure a permanent level for the concrete footings and both sides shall be separated by temporary spacers equal in length to footing width, and held in this position by suitable tie wires or wood cleats.

64. - FORMS FOR CONCRETE WALLS

Wood forms for concrete walls shall be built with two sides, of smooth, tongued and grooved boards, free from loose knots or other defects, laid tight horizontally, supported by 2" x 4" upright bracing members, set edge-wise, spaced not more than 24" c.c. Inner dimensions of the forms to correspond with wall thickness shown on plans, or local building code, if the requirements in the latter exceed plan size. Suitable removable temporary spacers as well as tie wires, shall be placed at 18" vertical intervals at each upright brace to prevent distortion while concrete is being poured.

65. - CELLAR HATCHWAY BULKHEAD

Bulkhead sides shall be constructed with a 2"x4" plate secured to masonry cheek walls by anchor bolts (Refer to Cellar Entrance, Std. No. 36) and connected at top step level with a 2"x4" sill bedded in mortar.

65. - CELLAR HATCHWAY BULKHEAD (CONTINUED)

The sides and batten doors (one up to 3'0" in width, two over 3'0" in width) shall be constructed with D & M beaded pondosa pine or equal 4" boards carefully selected to be free from loose knots or other surface defects.

Each door to be assembled with three 1" x 4" square edge battens (two horizontal and one diagonal) and be secured to bulkhead sides with three 6" "Tee" hinges and be equipped with a wooden swivel bar bolt and keeper. Sides of bulkhead to be equipped with a wooden brace to support door when open.

66. - GIRDER SUPPORTS

Girder supports, either "lally" columns (4" diameter concrete filled steel pipe), wood posts or brick piers shall be set plumb and anchored with appropriate bases and caps to the footing and girder.

67. - GIRDERS (WOOD)

Depending on the span, load, design and local code or other governing authority, girders may be either solid or built-up wood. Unless otherwise indicated on plans, girders shall be of the flush type.

Girders, where they rest on masonry walls, shall have at least 4" bearing surfaces, and shall be "shimmed" with steel plates, slate or asbestos shingles.

Wood girders shall be installed with the "crown" edge up. When built-up, they shall be stagger-nailed with 40d common spikes, 12" c.c. from both sides. Joints shall occur only over columns, piers or on walls.

68. - GIRDERS (STEEL)

Where required by local ordinance, code or architect's plan or specification, steel girders of size and weight described on plan or by local building engineer, shall be set on masonry walls, piers or steel girder supports. Where girder rests on masonry walls, such portions shall be laid in and grouted solidly with 1:2½ cement mortar, and be provided with a steel bearing plate, 5/16" thick designed to carry the load. The girder shall have a minimum bearing of 4" on walls or piers.

69. - SILLS, WALL PLATES AND ANCHOR BOLTS

Wall sills or plates in continuous lengths, in sizes to conform to plan local code or other governing authority, shall be squared, leveled, "shimmed" and set in mortar. End joints shall occur only at corners or over solid masonry. Sills, 2" thick may be butted and nailed. Those more than 2" thick shall be halved, lapped and nailed.

Anchor Bolts: At not over 12" from each end of each section of sill or wall plate and not over 3'0" c.c. on all sections exceeding 10'0" in length, threaded anchor bolts 1/2" diameter, provided with nuts and 1-1/2" washers and of a minimum length (18" for masonry units, 10" for poured concrete walls) sufficient to extend 1/2" over top of plate, shall be installed in the masonry. When thoroughly set, they shall be used to secure the sills and wall plates to their proper levels and positions.

70. - JOISTS

After sizing, joists shall be laid "crown" edge up to a level top line, spaced according to plan, doubled at "headers" and "trimmers" and under all bearing partitions.

Joist over drop girders, wherever possible, shall be lapped and spiked instead of being butted together.

Joists laid with "flush girders" shall be supported with nailing strip or metal "stirrups" and the ends tied to each other across the girder with steel tie straps.

When joists are framed into a Steel I beam or channel, the top of the joist shall extend sufficiently above the top of the steel member to allow for the wood shrinkage.

Where tile floors are supported by wood joists, the upper edges of the joists shall be chamfered and have a 1"x2" furring strip, nailed on each side, 4" below the top edge to support the sub-floor.

Cutting: Any cutting of joists required for the installation of plumbing and heating lines shall be done by the carpenter, who shall also install any "headers" necessary to maintain the structural strength.

Bridging: Before sub-floor is nailed, one straight row of cross-bridging (minimum cross section three sq. in.) shall be installed (by nailing each upper end with two 8d common nails) between joists in the center of spans up to 16'0". After sub-floor is laid, lower ends of bridging are similarly nailed. For greater spans, use two rows of bridging spaced equally.

71. - PORCH JOISTS

Porch floor joists spaced according to plan shall be installed level with, and parallel to, the side of the house to which the porch is attached, and shall have a pitch across the joists from the house to the outer edge of the porch of 1/8" per foot.

72. - FRAMING (BALLOON)

Local building code or the Owner's selection shall determine whether the frame will be Balloon or Platform type construction.

Grade of Framing Lumber: All framing lumber shall be No. 1 or No. 2 grade depending upon Owner's selection in accordance with grades and minimum sizes to correspond with "Simplified Practice Recommendation R-216-29" on lumber issued by the U.S. Dept. of Commerce and generally known as "American Lumber Standards" or the "Grading Rules" issued by the Southern Yellow Pine Manufacturer's Ass'n. or the Western Fir Manufacturer's Ass'n.

Balloon Frame Construction: Outside wall studs shall extend from foundation wall to rafter plate. Second floor joists rest on a ribbon board. Bearing partition studs extend from girder to the plates of the first floor partition. Second floor bearing partition studs from the top of the first floor bearing partition plates to the second floor bearing partition top plates.

73. - FRAMING (PLATFORM)

Platform or Western Construction: Built with framing lumber to grades as described in Std. No. 72 consisting of a box sill at each floor level. Stud walls are one story in height with one bottom and two top plates. The joists on each floor level shall be covered with sub-floor and the stud wall plates placed on top of the sub-flooring.

74. - INTERIOR PARTITIONS (2" x 4" STUDS)

All studs shall be one piece from plate to plate, or plate to sill or header, cut square to required length, and spaced as shown on the plans. All inside corners shall be built of two pieces, one 2" x 4" and one 2" x 6" set so as to provide full nailing support for the plaster base. Studs shall be set plumb and "toe-nailed" to the plates, and where possible, against the side of joists. Top plates shall consist of two pieces, the second top plate to extend or recede sufficiently to form a connecting lap-joint between partitions, which shall be well braced in all directions until supporting framing is in place.

75. - INTERIOR PARTITIONS (2" x 6" STUDS)

Wherever indicated on plan, to provide added structural strength, the construction shall be similar to 2" x 4" partitions except that 2" x 6" framing members are used. In order to provide an unbroken wall surface to conceal plumbing or heating lines, extra width partitions shall be extended to the nearest corner.

76. - DOOR FRAME OPENINGS

Unless otherwise shown on plan, door frame openings up to 3'0" wide shall be constructed with double studs and 2"x4" double headers set on edge flush with edge side of the studs; from 3'0" to 5'0" wide, double studs and 2"x6" double headers; 5'0" to 7'0" wide, double studs with 2"x8" double headers set on edge; over 7'0" wide, double studs with 2"x10" headers.

77. - WINDOW FRAME OPENINGS

Unless otherwise shown on plan, window frame openings up to 3'0" wide shall be constructed with double studs and 2"x4" double headers set on edge flush with edge side of the studs; from 3'0" to 5'0" wide, double studs and 2"x6" double headers; 5'0" to 7'0" wide, double studs with 2"x8" double headers set on edge; over 7'0" wide, double studs with 2"x10" headers.

78. - FIRE-STOPS (WOOD)

Where local code prescribes wood fire-stops, these shall be short lengths of 2" x 4" accurately cut to fit snugly between framing members and "toe-nailed" at each end with two 8d nails. (For brick fire-stops refer to Standard No. 56.)

79. - FURRING AND GROUNDS

Wood furring, 1" x 2", shall be applied at right angles to all framing members spaced over 16" c.c. or where the application directions of a manufactured product prescribes furring at closer intervals, either for structural strength or pattern layout.

Where the material application occurs over previously plastered surfaces, channels may be cut through the plaster to expose the plaster base and in such instances 1/2" x 2" furring may be used.

80. - ROOF FRAMING (COMMON)

Common Rafters: Rafters, selected for proper size, shall be placed "crown" edge up, accurately laid out and cut to insure close fit, provided with a 3" plate bearing surface, spaced according to plan dimensions and securely nailed.

Collar Beams: Collar beams of sizes shown on plans (or a minimum of 1" x 6" in unfinished attics and 2" x 4" in finished attics) shall be installed on each alternate pair of common rafters at a height approximately $2/3$ of the distance between floor and ridge.

81. - ROOF FRAMING (VALLEY AND HIP RAFTERS)

Valley and Hip Rafters 2" wider than common rafters shall be selected for soundness and straightness and be accurately laid out, cut and set "crown edge" up.

82. - WALL SHEATHING (HORIZONTAL)

Sheathing shall fit snugly and be driven tightly between the rafters and up to roof boards. All cross joints shall center on bearings and be staggered to avoid adjacent joints on the same stud. Each 6" board shall be nailed with two 8d common nails at every bearing; 8" boards require 3 nails.

83. - SUB-FLOORING (LAID STRAIGHT)

Where specified or shown on plan, D & M or Ship Lap # 2 Boards, preferably 6" and not over 8" wide, shall be laid at right angles to the joists, driven tight with end joints centering on joists and be nailed at each bearing with two 8d nails.

84. - ROOF BOARDS

For J-M Asbestos, J-M Asphalt, slate, tile and Metal Roofing, the roof boards (preferably 6" and not over 8" wide) shall be applied at right angles to the rafters, tightly driven with cross joints (which are always centered on rafters), staggered to avoid two adjacent joints on the same rafter. Each 6" board to be nailed with two 8d common nails at every rafter; 8" boards require 3 nails.

For wood shingle roofs (depending on local custom or prevailing code), roof boards may be applied as specified above, or roof boards (usually 1" x 4") or shingle lath (usually $5/4$ " x $2-1/4$ ") are applied with a center spacing to correspond with the shingle exposure to weather.

85. - WALL SHEATHING (DIAGONAL)

Sheathing shall be applied diagonally, with direction reversed on each elevation, fitted snugly and driven tightly between rafters and up to roof boards. All cross joints shall center on bearings and staggered to avoid two joints adjacent on the same stud. Each 6" board shall be nailed with two 8d common nails at every bearing; 8" boards require 3 nails.

86. - SUB-FLOORING (LAID DIAGONAL)

Sub-flooring preferably 6" and not over 8" wide shall be laid diagonally, and driven tightly with direction reversed on each floor. End joints shall center on joists and be nailed at each bearing with two 8d common nails for 6" boards and three nails for 8" boards.

87. - WALL SHEATHING (J-M INSULATING BOARD SHEATHING 25/32" THICK)

To minimize the number of horizontal joints and their required "headers" for nailing supports, the largest stock sizes of J-M Insulating Board shall be applied vertically with edges 3/16" apart, centered on studs and nailed from the center of the sheet with large, flat-head galvanized 2" roofing nails, spaced in accordance with manufacturer's specifications.

88. - BUILDING PAPER

Depending on local or F.H.A. requirements, cover all tight roof boards with 15 lb. or 30 lb. per square J-M Slater's Asphalt or Asbestos Felt, lapping horizontal joints 6" and vertical laps 6".

Cover all sidewall sheathing with J-M Medium Weight Improved Weathertite Building Paper, lapped 4" on horizontal laps and 4" on vertical laps.

When the finished floor is ready to be laid, the sub-floor shall be swept clean and J-M Slater's Asphalt or Asbestos Felt shall be laid.

89. - CORNICE (OPEN)

Open cornice roof boards shall be of finished 3/4"x4" D & M stock (usually beaded partition) applied "face side" down on the eaves to extend one board width inside the wall line. Continue up the "rakes" with 4 short boards to the side wall line and extend every alternate 4 boards to the second rafter inside the wall line in order to provide adequate cornice support.

90. - CORNICE (CLOSED)

Rafter ends (or attached members required to extend to the cornice or overhang line) shall be accurately aligned, "plumb" cut to receive frieze board, and connected to the building wall with horizontal "look-outs" accurately leveled to serve as nailing supports for soffit, fascia, crown and bed mold according to plan or detail. The soffit may be either beaded wood ceiling, J-M Standard Flexboard or J-M Tempered Hard Board.

91. - RAKE OR EAVE FINISH

Rake or Eave finish shall be constructed to width shown on plan, with sound, selected finish boards and moldings, free from loose knots or other surface defects. Where incline parts meet with horizontal or vertical members they shall be mitered at the proper angle to effect an unbroken intersection.

92. - GUTTERS (WOOD)

Fir molded gutters shall be erected in continuous lengths, fitted with copper outlet tubes, properly pitched and secured with suitable size brass screws.

92. - GUTTERS (WOOD) (CONTINUED)

All joints shall be accurately miter-cut and joined together with brass wood screws after contact surfaces have been treated with white lead or J-M Plastic Cement. The ends shall be finished with return miters. The trough shall be treated with two coats of prepared exterior paint.

93. - WATER TABLE

Water Table on frame structures shall consist of 1" x 8" or 1" x 10" select, square-edge finished boards, free from loose knots and other defects and a molded drip cap member installed to a true level with all exterior corner joints mitered. The lower edge shall extend sufficiently below the frame structure to cover the joint between the foundation and sill.

94. - EXTERIOR FINISH

Corner Boards, soffit, fascia, bed mold, crown mold, finish boards, etc., shall be of clear stock, machine sanded, of size and thickness shown on plan, and be applied in a workmanlike manner, finish nails of appropriate length to be carefully countersunk.

95. - PORCH LINTELS

The lumber to be used for porch lintels shall be carefully selected for soundness and shall be free from loose knots or checks which would impair the structural strength. All built-up lintels shall be of two or more members of proper size, spiked together with "crown edge" up, and blocked if necessary to the width shown on the plans.

The framing members shall be covered with a finish lumber fascia and soffit, together with the necessary moldings according to plan. Where shown solid lintels, smoothly surfaced, may be installed without finish material.

96. - PORCH RAFTERS

Porch rafters, selected for proper size, shall be placed "crown" edge up, accurately laid out and cut to insure close fit, provided with a 3" plate bearing surface, spaced according to plan dimensions and securely nailed.

97. - PORCH CEILING JOISTS

Porch ceiling joists shall be of sizes shown on plan or demanded by local code, spaced not over 16" c.c., placed parallel to the side of the house to which the porch is attached, with a firm bearing on side lintels and be supported on 8'0" centers with 1" x 4" hangers nailed to sides of porch rafters and ceiling joists to prevent sagging.

98. - PORCH CEILING

Beaded ceiling shall be applied on the under side and at right angles to the porch ceiling joists. Each piece shall be accurately fitted, driven tight and blind nailed with 6d finish nails at all bearings, breaking joints over the ceiling joists.

99. - PORCH COLUMNS AND NEWELS

Porch Columns, with appropriate caps and bases, of the type and size shown on plan, shall be centered under porch lintels according to measurements and be securely anchored to the floor and lintel.

Newel posts shall match the design of the column selected and be of the nearest proportionate standard stock size. Columns and newels shall be primed immediately after setting.

100.-PORCH RAIL (WOOD)

Porch rail shall consist of balusters of the type selected and spaced as shown on plan and shall be set between a milled and plowed top and bottom rail, which shall be centered on the columns.

Porch rail shall be primed immediately after erection.

101.-PORCH BULKHEADS (WOOD)

After suitable masonry foundations have been installed, wooden braced frame of 2" x 4" members shall be constructed to a size which, after it is covered with horizontal wood sheathing and the specified finish, will correspond with the plan dimensions. Side bulkhead finish shall be 1" thick and top finish shall be 1-1/4" thick of carefully selected stock free from loose knots or other surface defects, after erection the entire surface shall be primed.

102. - PORCH STEPS (WOOD)

According to plan sizes, porch steps shall be built by installing "rough horses": two for steps up to 3' wide; three, up to 6' wide; four, up to 8' wide; and one additional for each foot exceeding 8'; which shall be accurately laid out and cut (unless larger size is shown on plan) from 2" x 10" sound stock.

Depending on grade and number of steps required, "rough horses" shall rest on suitably located masonry piers at their lower edge, and be appropriately spaced, leveled and spiked to porch floor headers.

Nosed treads 1/4" clear grain, edged stock, not less than 10" wide, and 1" thick risers (8" maximum) shall be securely nailed to the "rough horses". Cheeks, bulkheads, and finished stringers shall be constructed as shown on plan elevation, refer to Standard No. 101.

Immediately after erection the entire exposed surface shall be primed.

Note: For concrete steps, refer to Standard No. 40; for brick steps, refer to Standard No. 55.

103. - PORCH LATTICE

Lattice frames of lengths shown on plan and to widths which will cause the finished frame to clear the finished grade line 3", shall be constructed with selected 1-1/4" thick pondosa pine or equal stock.

The corner joints shall be dowed or reinforced with metal corner angles. Lattice strips shall be applied in accordance with the spacing and pattern shown on the plan elevation. In the absence of such detail, the lattice strips shall be applied vertically and horizontally to form checkered squares, spaced uniformly, each space not to exceed the width of the lattice strip.

104. - ROOFING ASBESTOS SHINGLES (NEW WORK)

Depending upon the selection of type, kind and color, J-M Rigid Asbestos Shingles shall be applied in accordance with application directions issued by the manufacturer for the specific shingle selected over tightly laid roof boards which have been previously covered with a layer of J-M Asphalt or Asbestos Felt. Ridge and Hip Shingles and Valley shall also be installed in accordance with these directions.

105. - ROOFING ASBESTOS SHINGLES (OLD WORK)

Depending upon the selection of type, kind and color, J-M Rigid Asbestos Shingles shall be applied in accordance with the application directions issued by the manufacturer for the specific shingle selected. These directions shall also be observed with regard to the preparation of the old roof surface, which provides for "Servicing". The application of Asbestos Felt is not required.

106. - ROOFING ASPHALT SHINGLES (NEW WORK)

Depending upon the selection of type, kind and color, J-M Asphalt Shingles shall be applied in accordance with application directions issued by the manufacturer for the specific shingle selected over tightly laid roof boards which have been previously covered with a layer of J-M Asphalt Felt. Ridge and Hip Shingles and Valleys shall also be installed in accordance with these directions.

107. - ASPHALT SHINGLES (OLD WORK) (ROOFING & SIDING)

Depending upon the selection of type, kind and color, J-M Asphalt Shingles shall be applied in accordance with the application directions issued by the manufacturer for the specific shingle selected. These directions shall also be observed with regard to the preparation of the old roof or wall surface, which provides for "Servicing". The application of Asphalt Felt is not required on roofs.

108. - EAVES STRIP (WOOD)

Where wooden Eaves Strip are selected by Owner, the existing wood shingles shall be cut and removed for a distance of 3" from the present roof edge. After this is done, a 1" x 3" Pondosa Pine Strip shall be installed in the recess, and after it is primed, the roof shall be applied in the usual manner.

109. - METAL EDGE

Where Metal Edge is selected by Owner, this shall be applied with the entire exposed edges of the present roof on the top of the existing wood shingles. After installation, the roof shall be applied in the usual manner.

Galvanized Metal Edge shall be given a priming coat before roof is laid; Copper Metal Edge does not require painting.

110. - ROOFING (ASBESTOS READY-TO-LAY)

Roof surface shall be of dry, well-seasoned D & M boards (not over 6" wide) laid tight and nailed with two 8d nails at each end and at each rafter -- any loose knots or knot holes shall be covered with pieces of tin nailed in place.

The entire roof surface shall be cleared of all obstructions and swept clean.

Minimum Pitch and Application: The Contractor shall carefully observe manufacturer's application directions for minimum pitch, method of laying, lapping and nailing for the specific type of roofing selected.

Note: Not suitable for flat decks.

111. - ROOFING (ASPHALT READY-TO-LAY)

The same procedure as described for Asbestos Ready-to-lay Roofing in Standard No. 110 shall be carefully observed.

112. - ROOFING (WOOD SHINGLES)

Wood shingles shall begin with a double starter course projecting 3/4" over finished eave or rake with all vertical joints broken at least 1-1/2" with shingles in succeeding courses. The maximum exposure to weather, for the various sizes, is to be in accordance with local code or other governing authority.

113. - ROOFING (CANVAS)

Roof surface shall be prepared as described in Standard No. 110 and then full width strips of 16 oz. canvas, the entire length of the roof, shall be tightly stretched horizontally starting at the outer edge of roof and nailed with 1" 16 gauge copper flat-head nails, spaced 1" c.c. on all outer edges. Before laying canvas strips, a liberal coat of floor and deck paint or thinned white lead shall be applied according to manufacturer's directions.

The laps (minimum 1") of succeeding strips shall be made in direction of the water flow and be stagger-nailed 1/2" c.c. Before nailing lap, a liberal coat of paint shall be applied to the joint-lap edges. After the entire deck has been applied, a liberal coat of floor and deck enamel or thinned white lead shall be applied over the entire surface.

113. - ROOFING (CANVAS) (CONTINUED)

Succeeding coats of paint shall be applied as each coat sets until a uniform visible paint film, free from "soaked in" spots, results.

114. - ROOFING (SHEET METAL)

Roof surface shall be prepared as described in Std. No. 110 and, depending on plan or Owner's selection, be covered with either tin, copper or galvanized iron. All joints shall be "locked" by "breaking" flanges on each sheet edge, and nailed with 3d nails under open flange, which shall be neatly closed with wooden or rubber faced mallet, all joints and seams to be covered with powdered resin flux, neatly soldered and have excess flux removed with wire brush or scraper, ferrous roofing shall be primed with metallic paint immediately after exposure to weather has caused minute rust spots to appear on exposed surface.

115. - SIDING (ASBESTOS SHINGLES AND CLAPBOARDS) NEW AND OLD WORK

Depending upon the selection of the type and kind of J-M Asbestos Side Wall Shingles and Clapboard, the material shall be applied in accordance with application directions issued by the manufacturer, which govern the specific selection and also the manner by which flashings, corner moulds and window strips shall be installed.

116. - SMOOTHWALL

Where specified to seal, straighten and prepare exterior wall surfaces which have been previously covered with wood siding or shingles, to receive J-M Asbestos Siding Shingles or Clapboard; J-M Smoothwall, a rigid, waterproof sheet 40" x 60" x 1/8" thick shall be fitted and nailed with joints butted, directly over the old wood siding.

117. - BEVEL STRIPPING

Where specified for the application of J-M Roofing or Siding Shingles or Clapboard over old roofs or sidewalls, 1/2" x 3" bevel stripping shall be applied directly below the butt-ends of each course of old wood roofing shingles or below the butt-end of previously applied wood siding at the proper intervals to provide sound nailing support for the siding shingle application.

118. - SIDING (WOOD)

Bungalow or Bevel Siding: Bungalow or Bevel Siding of the size, kind and grade as shown on the plans or selected by Owner, shall be applied horizontally, with proper exposure, fitted accurately at joints and casings, and slightly "sprung" into place, nailed at every stud with resin-coated box nails with the heads properly set. The corners shall either be alternately lapped or mitered as specified when pilasters or corner boards

118. - SIDING (WOOD)

are not shown on the plans. To align the courses with the window heads and sills, the proper exposure may be slightly modified. The siding shall be given a prime coat of paint immediately after application. (Refer to Painting Standards No. 279)

Wavy Bungalow Siding: Wavy Bungalow Siding shall be of the same size, material and grade as Bungalow Siding, except that the exposed butt is shaped by ripping in irregular curves. The application of Wavy Bungalow Siding shall be the same as for Bungalow Siding. It shall be given a prime coat of paint or stain immediately after application. (Refer to Painting Standards No. 279)

For Drop (or German) Siding of the size, kind, grade and pattern as shown on the plans, the application procedure shall correspond with that described for Bungalow or Bevel Siding.

119. - SIDING (WOOD SHINGLES)

Wood shingles shall begin with a double started course over a 1/2" thick cant strip, with all vertical joints broken at least 1-1/2" with shingles in succeeding courses. The appropriate exposure to the weather for the various shingle lengths shall be determined from the plan or by reference to the Outline Specification.

120. - CAULKING (DOORS AND WINDOWS)

During the application of Asbestos Siding Shingles and Clapboards as described in Standard No. 115, door and window frames shall be sealed by applying a coat of J-M Asbestos Caulking Putty (knife grade) in a layer approximately 1/8" thick, 3" wide completely around each door and window opening. As the siding Shingles are applied, they shall be embedded in the caulking putty; and after the work is completed, any putty which has extruded shall be removed and the joint neatly pointed.

On Brick or Stone Veneer, or Solid Masonry jobs, after the masonry has been washed down and the new frames have received priming coat, J-M Caulking Putty (gun grade) shall be used to seal the joint between the frame and the masonry with a caulking gun which has a nozzle with minimum 3/8" diameter.

121. - FINISHED FLOOR

Finished flooring 25/32" thick of all types shall be thoroughly kiln dried and manufactured according to the specifications of the Lumber Association which governs the specific kind of flooring selected.

The finished flooring shall be delivered after the plastering has dried, and be kept dry before, during, and after laying.

Unless otherwise specified, flooring shall be laid parallel with the long dimensions of the room before standing trim or base is installed.

121. - FINISHED FLOOR (CONTINUED)

Application over sub-floor: Before laying finished floor, the sub-floor shall be swept clean; nails and other projections removed, and covered with a layer of J-M Building Paper, Asphalt or Asbestos Felt, or J-M Deadening Felt. The short lengths shall be used as starters and closures, but shorts shall not be laid adjacent to each other except in closets. Flooring shall be driven tight and blind-nailed 16" c.c. with 8d cut flooring nails.

Application over joists: Where sub-flooring is specifically omitted on the Outline Specification, the finish shall be laid only after the plaster is dry. All cross or end joints shall occur over a joist.

Cross Joints: Cross joints in adjacent courses shall be separated at least 16" and, (unless end-matched flooring is used) be accurately squared and slightly undercut and driven tight before nailing. Cross joints shall be minimized at the place where flooring continues through openings from one room to another.

Protection: Immediately after laying is completed, the floor shall be covered with J-M Weathertite waterproofed, non-staining building paper to protect it until the sanding, filling and finishing operations have been performed.

122. - LAYING PARALLEL WITH ALL WALLS

To effect symmetry, after squaring the room, snap chalk lines on the felt diagonally from corner to corner, and successively lay floor boards parallel with the squared face of each wall so that the tongued edge corner of each alternate board bisects the chalk line, continue in this manner until the smallest dimension of the unfinished area is approximately 4'0" x 6'0", at which point the balance of the floor shall be laid parallel with the long side of the room.

Border Strip: When specified, a continuous border strip of walnut 1" wide shall be laid 12" to 18" from the face of the walls of the room, accurately mitered at each corner.

123. - FLOORING (RANDOM WIDTH PLANK)

Plank flooring shall be thoroughly kiln dried 25/32" thick, tongued and grooved, depending on selection from the Finished Floor Table of specific or random widths. These latter to consist of 4", 5", 6", 7" and 8" wide planks.

Application: Application procedure shall follow the practices for laying finished flooring as previously described in Standard No. 121, except that in random width, no two similar widths shall be laid adjacent and that 8d cut nails shall be spaced 8" c.c.

Wood Screws and Plugs: After plank is laid, holes symmetrically spaced and of the proper size to receive No. 14, 1-1/4" flat-head iron wood screws shall be drilled and counter-bored 3/4" diameter by 1/4" deep, to accommodate oak or walnut dowel plugs which shall be glued and inserted in the counter-bored holes after each screw has been tightly driven.

123. - FLOORING (RANDOM WIDTH PLANK) (CONTINUED)

Spacing: The spacing of holes shall start 2" from the ends, and 1" from the outer edges of each plank, and (depending on the plank lengths) be spaced symmetrically lengthwise approximately 32" c.c.

Screws Required for Plank Widths: Planks up to 5" wide require two wood screws, and over 5" wide, three wood screws across the width of the plank. Where three screws are used, the center holes shall be spaced to center between those on the outer edges.

124. - FLOORING (SANDING AND SCRAPING)

Where specified, finish floors shall, (after edges and areas which may be difficult of access have been hand-scraped) be machine sanded to a true, smooth and even surface. Immediately after scraping and sanding, hardwood floors shall be stained and filled; softwood floors, stained and either varnished or shellaced, depending on Owner's specification. (Refer to Standard 278-281). In the event that filler or stain cannot be applied immediately, sanded floors shall be protected with J-M Improved Weathertite Building Paper.

125. - FLOORING (PORCH-WOOD)

Tongued and grooved porch flooring in lengths sufficient to extend in one piece from house wall to outer edge of porch, 1-1/8" thick, of the kind, width and grade selected, shall have each joint coated with thinned white lead or prepared exterior paint, be driven tight and blind-nailed to each joist with 8d cut nails. After floor is laid, the outer ends shall be cut square to a straight line and finished by planing to form a nosing and the entire exposed surface and edges primed with thinned floor and deck enamel.

126. - FLOORING (LINOLEUM)

The Contractor shall renail all warped or loose boards, fill knot holes with cork plugs, remove carpet strip and sweep clean.

Deadening Felt: J-M Deadening Felt, with edges cut true and butted together, shall be cemented to the floor with an approved linoleum cement, and rolled with a heavy roller to assure complete adhesion and an even surface.

Application: Linoleum of the grade and weight selected; in color and pattern to correspond with sample previously approved by Owner shall be cut into room length sections, and after careful fitting around base, trim and other obstructions is complete, be laid in a coat of linoleum cement which has been applied to the Deadening Felt to within 6 inches of the edges of the linoleum strip. After the entire floor has been laid in this manner, the edges shall be raised and waterproof cement applied under the edges and joints. The entire surface shall be rolled and the joints and edges held in place with sand bags until the cement has set 8 hours.

127. - FLOORING (J-M ASPHALT TILE)

Application and Maintenance: J-M Asphalt Tile is invariably installed by J-M Approved Flooring Contractors, in strict accordance with manufacturer's specific recommendations. Maintenance is described in a booklet given to the Owner after completion.

Heavy Duty Asphalt Tile Flooring: Heavy Duty Asphalt Tile, in sizes 9" x 9", 9" x 18", 12" x 12", 12" x 24" are furnished in three plain colors: black, red, and mahogany. Four marbleized colors: white on black, terra cotta, yellow on mahogany, red, gold on black and white, gold on red.

Type "A" Tile Flooring: Type "A" Tile, 1/8", 3/16" and 1/4" thick are available in various regular and special sizes according to Johns-Manville price list and in plain and marbleized colors as follows:

| | | |
|-----------------------|-------------|-------------|
| The plain colors are: | Black | Tan |
| | French Gray | Buff |
| | Pearl Gray | Brown |
| | Dark Gray | Mahogany |
| | Red | Olive Green |
| | Terra Cotta | Emerald |

The Marbleized colors are:

| <u>Designation</u> | <u>Splash Color</u> | <u>Base or Field Color</u> |
|--------------------|------------------------|----------------------------|
| No. 102 | White | on Black |
| No. 103 | White and Yellow | on Rose |
| No. 104 | Terra Cotta and Yellow | on Mahogany |
| No. 107 | White | on Green |
| No. 108 | Buff | on Mahogany |
| No. 111 | Black and White | on Gray |
| No. 112 | White and Green | on Black |
| No. 118 | Red and Gold | on Black |
| No. 119 | White and Gold | on Red |
| No. 120 | White and Green | on Olive Green |
| No. 121 | White and Gold | on Terra Cotta |
| No. 123 | Brown and White | on Beige |
| No. 124 | White and Blue | on Dark Blue |
| No. 125 | White and Blue | on Light Blue |
| No. 126 | Red, Gold | on Cream |
| No. 127 | Black | on White |

128. - BASEMENT FLOORS (WOOD)

General Conditions: Concrete Floor shall be hot-mopped with two coats of J-M Asphalt Waterproofing Cement. Floor joists 2" x 4", spaced not over 16" c.c. shall be laid flat and be held in proper position until flooring is applied by temporarily nailed spacers. The joists shall be leveled and "shimmed" with slate, 24" c.c. to prevent joists from any sagging after floor is laid. Copper screened ventilation openings shall be provided at base, partition or wall intersection between each joist to prevent joist or floor dry-rot.

129. - FIR BASEMENT FLOOR

Where shown on plans or specified by Owner, 25/32" x 2-1/4" edge grain Fir Flooring shall be laid in full accordance with General Conditions described in Standard No. 128.

130. - YELLOW PINE BASEMENT FLOOR

Where shown on plans or selected by Owner, 25/32" x 2-1/4" edge grain Yellow Pine Flooring shall be laid in full accordance with General Conditions described in Standard No. 128.

131. - OAK BASEMENT FLOOR

Where shown on plans or specified by Owner, 25/32" x 2-1/4" edge grain Red Oak plain sawed flooring shall be laid in full accordance with General Conditions described in Standard No. 128.

132. - MAPLE BASEMENT FLOOR

Where shown on plans or specified by Owner, 25/32" x 2-1/4" Maple Flooring shall be laid in full accordance with General Conditions described in Standard No. 128.

133. - LINOLEUM BASEMENT FLOOR

Where shown on plans or specified by Owner, 25/32" x 3-1/4" fir flat grain flooring shall be laid in full accordance with General Conditions described in Standard No. 128. This shall be sanded, covered with J-M Deadening Felt laid in linoleum cement and Linoleum cemented to it in accordance with Standard No. 126.

134. - FRONT ENTRANCES

Depending on details shown on plan or selected by Owner. Front entrances consisting of door frame, door, pediment, sidelights, fan lights, or entrance hood shall be carefully assembled, and accurately installed.

135. - DOOR FRAMES (EXTERIOR)

Exterior door frames of the type, size and design as shown on the plans, rabbetted to receive 1-3/4" thick doors, shall be furnished with 1-1/8" thick casings and hardwood sills. All frames shall be assembled, squared, braced, set plumb, level and be securely nailed in strict conformity with the locations indicated on plan.

Basement Door Frames: Frames shall be 1-5/8" thick, 6" wide, rabbetted for 1-3/4" door, suitably anchored to the masonry, neatly caulked and finished with brick mold.

Flashing: Before setting frames, a 6" wide strip of asphalt felt, or other waterproof flashing, properly lapped, shall be nailed to the sheathing around the opening.

136. - GARAGE DOOR FRAMES

Mill Type Garage Door Frames of size to correspond with plan shall be pre-assembled, primed and set plumb and level in its proper position.

In frame garages, the door frames shall be securely spiked or lag-screwed to the surrounding frame supporting members. In masonry garages, the frames shall be attached by bolts built into the masonry or by suitable expansion bolts.

137. - WINDOW FRAMES

Window frames of the type, size and design shown on plans or indicated in the Outline Specification for Residential Construction, shall be furnished with 1-1/8" thick pondosa pine or cypress outside casings.

Installation: Frames shall be assembled, squared, braced and primed with paint, which shall be dry before frames are set.

Flashing: Before frames are set, a strip of asphalt felt, or other water-proof flashing, 6" wide, properly lapped, shall be nailed on the sheathing around each opening. Frames shall be set plumb and level in exact accordance with the locations shown on the plans.

138. - BASEMENT FRAMES (WOOD)

New Work: Frames of sizes shown on plan shall be assembled, primed and when paint is dry, set in correct plan location.

Old Work: Frame 2'10" x 15" fitted with 10" x 12" 3 lt. sash and equipped with rust resisting hardware shall be set into a neatly cut opening, spiked to sill, caulked and neatly pointed with cement mortar colored to match foundation. Frame and sash shall be primed before setting.

139. - BASEMENT FRAME AND SASH (STEEL)

New Work: Steel basement sash shall be set to proper plan location and securely anchored into the masonry. Sash openings which require glazing shall be glazed with D. S. glass embedded in approved steel sash putty.

Old Work: Steel basement sash 2'8" x 1'10" set into a neatly cut opening, caulked at the sides with cement mortar, color to match the foundation; the bottom shall be held in place by installing a cast-in-place concrete sill.

140. - WINDOW SASH

All double hung sash shall be 1-3/8" thick pondosa pine, and of the check-rail type, be properly primed with oil or paint. Sash shall be glazed with D. S. flat-drawn glass and shall be back puttied and secured with adequate rust-proof glazier's points and white lead putty.

140. - WINDOW SASH (CONTINUED)

Divided light sash may be glazed with single strength, flat-drawn glass in accordance with the standards set by sash manufacturers.

All sash shall be equipped with suitable sliding control consisting of either cast iron sash weights of proper weight (Std. No. 242) or spring sash balances as selected.

Sash shall only be fitted when thoroughly dry, with minimum clearance to permit free movement, and shall be primed, at least on all edges, immediately after fitting.

141. - BASEMENT SASH (WOOD)

Depending on frame sizes and plan description 1, 2, 3 or 4 lt. sash of correct size, 1-1/4" thick stock shall be neatly fitted, primed, and when paint is dry, hung and secured with appropriate rust resisting hardware.

142. - STEEL FRAMES AND SASH

Steel frames and sash shall be of an approved make, type and design to correspond with plans, equipped with non-ferrous hardware of finish specified, with either bronze or aluminum roll or flat screens. Steel frames and sash for frame structures shall be equipped with wood "bucks", be set square, plumb and level in accordance with the locations shown on the plans, securely anchored to the framing or masonry with metal ties. After frames are in place, they shall be caulked with J-M Caulking Putty.

143. - CASEMENTS AND FRENCH WINDOWS (WOOD)

All casement sash and "french" windows shall be accurately fitted and hung to swing in direction as indicated on the plans, equipped with rust-proof hardware, and adjustment controls which shall be approved before "Hardware Allowance" is set. See Standard No. 237.

144. - GLASS REPLACEMENT (NEW OR OLD WORK)

D. S. flat-drawn glass shall be cut to correct size, inserted in the cleaned sash opening, secured with glazier's points and sealed with white lead putty.

145. - STORM SASH

Mortised and tenoned storm sash, 1-1/8" thick, of the design selected shall be neatly fitted and hung with detachable rust-proof hangers and secured to the window sill with a hook-and-eye.

When specified, storm sash shall be equipped with ventilator slots and slide. All storm sash glass shall be back puttied, with D. S. glass for single lights and divided lights in accordance with manufacturer's specifications.

Numbers: To facilitate replacement, storm sash shall be numbered to correspond with screens.

146. - SCREENS (HALF LENGTH)

Mortised and tenoned screens, either 1-1/8" or 3/4" thick, of the design selected, covered with 16 mesh bronze or galvanized wire, stretched and rolled into anchor grooves and secured to the window stiles, shall be fitted to easily slide on metal screen runners.

Numbers: All screens shall be numbered with metal disc numerals and corresponding numbers secured to the sill.

147. - SCREENS (FULL LENGTH)

Mortised and tenoned screen frames, 1-1/8" thick, of the design selected, covered with 16 mesh bronze or galvanized wire, stretched and rolled into anchor grooves and secured with flush moldings, shall be hung on detachable hangers and secured to sill with hook-and-eye.

Numbers: All screens shall be numbered with metal disc numerals and corresponding numbers secured to the sill.

148. - COMBINATION AND SCREEN DOORS

Combination doors shall be equipped with one pre-manufactured removable screen and one glass panel of the design selected.

Screen doors, either bronze or galvanized wire shall be constructed as described for screens in Standard No. 147.

Combination or screen doors shall be neatly fitted, hung with three 3" rust proof hinges and fitted with rust proof lockset to match other hardware and equipped with a spring door check.

149. - BLINDS, SHUTTERS AND LOUVRES

Blinds, shutters and louvres of the design shown on the plans shall be of pondosa pine, 1-1/8" thick, with stiles and rails mortised and tenoned. Cut-out designs shall be neatly cut according to detail.

Batten Type Shutters: Batten type shutters shall be 1-1/8" thick, pondosa pine, fir or cypress, assembled in widths as indicated on the plans or details with brass wood screws.

Louvres: According to plan design, louvres shall be of 1-1/8" pondosa pine and covered on the inside with the 16 mesh bronze or galvanized wire.

Fitting and Hanging: Blinds and shutters shall be neatly fitted and hung with appropriate galvanized hardware.

Painting: Immediately after they have been fitted, blinds shall be removed to dry place and be primed with one coat of paint.

Numbering: To facilitate accurate replacement, the hinge edge and the blind stop to which it is fitted shall be marked with roman numerals, cut with wood stud.

150. - EXTERIOR DOORS

All Exterior Doors shall be minimum 1-3/4" thick stock, manufactured in the style, design as noted on plan or selected by Owner. Exterior front doors, where glass is specified shall be glazed with plate glass. Grade entrance or rear doors shall be glazed with D. S. flat-drawn glass.

151. - GARAGE DOORS

General Conditions: The Contractor shall install Garage Doors of the type shown on plans or selected by Owner. The doors shall be neatly fitted and secured by appropriate hardware in a manner to operate smoothly and close securely. A positive method of locking, intended to correspond with balance of garage door hardware shall be included in the installation.

After the doors are in place, they shall be immediately primed on all sides and edges to prevent swelling or warping.

Where plans show a one, two or three-car garage, each set of garage doors shall cover an opening of approximately 8' wide and the doors shall swing or slide open from either the left or right side of the garage corner or center post, depending on Owner's preference, location of work bench, separate entrance door, etc.

Where separate entrance door is provided, locking device shall be attached to the inner side of the garage doors. Where no separate entrance door is shown, the garage door locking device shall be attached to the exterior.

152. - SWINGING GARAGE DOORS

Mill Type Garage Doors, 4' x 8' x 1-3/4", either glazed or solid shall be installed in entire accordance with the General Conditions described in Standard No. 151. Each door shall be secured with three 3" "Tee" hinges, and equipped with semi-automatic adjusters to hold the doors open which are released for closing by a pull chain control.

An astragal to cover the joint between doors shall be firmly attached to the right-hand door and the locking device shall consist of interior vertical top and bottom bar-bolts for the left door. The right-hand door shall (if a separate entrance door is provided) be locked with a swinging wood bar which will engage in appropriate metal keepers attached to both doors. If no separate entrance door is provided, the right-hand door shall be provided with a galvanized concealed screw hasp and padlock.

153. - SLIDING GARAGE DOORS

In addition to the General Conditions outlined in Standard No. 151 which shall apply in their entirety, Mill Type Garage Doors, 4' x 8' x 1-3/4", either glazed or solid, shall be suspended from an exterior, tubular, slip-joint, steel track with removable stops on each end on ball-bearing adjustable roller hangers.

153. - SLIDING GARAGE DOORS (CONTINUED)

The track shall be protected with a metal-flashed hood for its entire length.

Suitable roller guides shall be set in the concrete base to hold the doors in vertical alignment during the entire distance of opening and closing travel. The locking device shall consist of a galvanized concealed screw hasp and padlock.

154. - TRIPLE SLIDING DOORS

In addition to the General Conditions outlined in Standard No. 151 which shall apply in their entirety, a matched set of three Mill Type Garage Doors, 32" x 8' x 1-3/4" shall be hinged together with six 6" strap hinges and be suspended from an interior applied, tubular, slip-joint, steel track which is provided with an appropriate radius section to enable the doors to slide (guided by suitable roller guides set in the concrete base) along the inner side of the garage. Only two of the doors shall be equipped with ball-bearing adjustable roller hangers. The third door without hanger shall act as the entrance door and be equipped with locking device consisting of galvanized concealed screw hasp and padlock.

155. - OVERHEAD TYPE GARAGE DOORS

In addition to the General Conditions outlined in Standard No. 151 which shall apply in their entirety, the Contractor shall follow the directions for proper installation issued by the manufacturer of the door hardware.

156. - DOORS (KALAMEIN)

Kalamein doors shall be of approved make, with fitted metal jambs, trim and self-closing hardware, securely anchored to studs or masonry, set plumb and level, all in accordance with Local Code.

157. - INTERIOR DOOR FRAMES OR JAMBS

Interior frames of wood to match other trim, in correct widths and sizes to fit openings shown on plan, with head jambs cut to exact length dadoed into side jambs, shall be assembled, squared, braced and set to register with grounds, plumb, level and "shimmed", with wedges, and securely stagger-nailed through "shims", approximately 8" c.c.

158. - INTERIOR DOORS

Doors in sizes, thicknesses and patterns as described on plan or door schedule or selected by Owner shall be closely fitted from the butt edge, hung with one pair 3-1/2" butts and fitted with a full mortised lock set of type and finish selected by Owner.

159. - DOORS (CUPBOARD)

Depending on plan sizes or cabinet openings, cupboard doors in wood to match other trim shall be closely fitted from the butt edge, hung with one pair 2" butts and fitted with a full mortised lock set of type and finish selected by Owner.

160. - DOORS (ACCESS)

Where shown on plan, construct frame from interior finish boards, apply trim to match remaining trim, and neatly fit access door as described in Standard No. 159.

161. - INTERIOR TRIMSETS

Depending on plan description or Owner's selection, trimsets for doors, windows and cased openings shall be delivered after plaster is thoroughly dry. They shall be carefully selected and neatly installed with tight joints and all nails set and be free from hammer marks.

162. - CASED OPENINGS

Interior frames of correct width and size without stops, in wood to match remaining trim shall be assembled with head dadoed into side jambs, squared, braced and set to register with the plaster grounds; plumbed, leveled, "shimmed" where required, and stagger-nailed through "shims" approximately 8" c.c. Casing, in continuous lengths to match remaining trimsets shall be installed on both sides of opening.

163. - INTERIOR TRIM AND MOLDINGS

Interior moldings such as cornice mold; window or door stops; picture mold; chair rail; cove, crown, bed, panel and quarter-round moldings shall be of clear machine sanded stock, pattern and kind of wood to correspond with remaining interior trim. It shall be accurately installed in continuous lengths (at least up to 12") and "scarf" jointed or mitered where two pieces are necessary.

Interior angles shall be formed by "coping" and exterior corners by mitering. To assure permanent, tight joints, moldings shall be cut sufficiently long to enable them to be snugly "sprung" into proper position.

164. - BASE (WOOD)

Clear, sanded 25/32" stock of widths to correspond with plan shall be installed after finish floor is laid and standing trim is in position.

Base, depending on selection, may consist of one, two or three members. Base-board shall be butt jointed at interior angles and mitered on exterior corners.

Base or shoe mold shall be "coped" at interior angles and mitered at exterior corners.

164. - BASE (WOOD) (CONTINUED)

Shoe mold shall be pre-finished before application to correspond with floor finish and after the base-board has been painted and is thoroughly dry, and the floors have been scraped and finished, the shoe mold shall be installed by nailing to the finished floor.

165. - MANTELS (WOOD)

Where specified, mantels of the type, size, pattern and kind of wood shown on plan, or selected by Owner, shall be factory assembled of clear, kiln-dried stock protected with waterproof paper, crated and delivered after plaster is thoroughly dry.

The mantel shall be set plumb and level and secured to the finished wall surface after the fireplace opening, including facing and hearth, are complete and have thoroughly dried.

166. - CABINETS

All cabinet work, such as bookcases, mantels, china cabinets, window seats, telephone cabinets, medicine cabinets, ironing board and kitchen cabinets shall be furnished as specified in the Outline Specification for Residential Construction.

Cabinets shall be delivered after the plaster is thoroughly dry and be carefully stored until ready for installation. Cabinets, placed as designated on the plans, shall be neatly scribed, fitted and securely fastened in place. All drawers and doors shall be accurately fitted after fitting and setting, the cabinets should be primed, and after priming is dry appropriate hardware as selected shall be applied.

167. - SHELVING AND HOOK STRIPS

Machine sanded square stock, selected for soundness and absence of surface defects or loose knots, shall be accurately cut and fitted to the heights and spacing shown on plans.

Shelves shall be supported by resting on securely nailed shelf cleats and shall be removable.

Where the space below lowest shelf exceeds 3'0", the lower shelf cleat shall consist of a 1" x 4" molded hook strip, which shall be provided with suitable garment hooks spaced not over 12" c.c.

168. - CLOSET POLES

Where shown on plan, hardwood rods 1-1/2" in diameter shall be installed at proper heights (not less than 4'0") with suitable wall sockets to permit rod removal.

169. - CEDAR LINING

Where specified as a lining in closets, tongued and grooved narrow width aromatic cedar boards 1/2" thick shall be applied by blind-nailing directly to finished interior surface including walls, ceilings and interior surface of the door.

On old work, the base should be removed and the cedar lining shall extend to the floor and be finished with a shoe mold. On new work, the lining should be installed in a like manner before the base is in place.

170. - INTERIOR FINISH BOARDS

Clear 25/32" stock, machine sanded and kind of wood to match remaining interior trim, in widths as shown on plan shall be neatly and accurately installed with butted interior angles and mitered exterior corners, "sprung" into position and nailed with finish nails slightly countersunk and left free from hammer marks.

171. - DRY WALL FINISHES OVER STUDS (GENERAL CONDITIONS)

Preparation of Walls (New Work): The studding shall be set plumb and true, 16" c.c. with 2" x 4" headers spaced to provide a bearing surface at all horizontal joints.

Preparation of Walls (Old Work): Where existing plaster surface is uneven or badly broken, cracked or loose, 1" x 2" or 1/2" x 2" furring strips shall be appropriately spaced, leveled and nailed, either on top of existing plaster or in recessed channels and "shimmed" where necessary to bring the face of the furring to a true plane. Where existing plaster surface is even and well keyed, J-M Dry Wall Finish products may be applied direct to the plaster when nailed in accordance with manufacturer's directions.

Layout: All walls shall be carefully planned and laid out for design and economical use of material before any application of Dry Wall Finish materials is begun. Where stud spacing exceeds 16" c.c. or when symmetrical joint spacing is desired, wood furring, spaced as recommended and specified by manufacturer for each type of material, shall be applied.

Joints: J-M Insulating Board products shall be butted snugly at the joints, but not forced tightly together. Where joints are to be covered with J-M Batten or Wood Molding Strips, the sheets shall be spaced approximately 1/8" apart. Hardboard and J-M Asbestos Flexboard and Wainscoting shall be applied with joints closely fitted and butted.

171. - DRY WALL FINISHES OVER STUDS (GENERAL CONDITIONS) (CONTINUED)

Metal Moldings: Where aluminum or other metal moldings are used over Flexboard, Hardboard or Asbestos Wainscoting; they shall be cut and properly fitted to cover the entire joint and be neatly mitered where intersections occur.

Window and Door Frames (New Work): Product thickness and size of furring will determine the finished width of pulley stile and door jamb required to assure proper fitting of trim. Wherever practicable, this shall correspond to stock frame widths.

Window and Door Frames (Old Work): Any difference in wall thickness between existing plaster and face of new product, particularly around door, window and other openings, shall be treated with rabbeted or "backband" moldings, or by installing new jambs and trim.

Electric Outlets, Plumbing Fixtures and Radiators: All electric outlet boxes shall be set to register with the finished surface of the new wall treatment.

On old work, sinks, lavatories, closet tanks and radiators shall be disconnected and removed until the new decorative wall treatment has been completed, then properly reset with all waste, supply and heating pipe joints tight.

Application: The Dry Wall Finish shall, unless furring is specified, be applied directly over upright studs, which shall be spaced not more than 16" c.c. and horizontal headers at all cross joints. All nailing shall start at the center of the sheets. (Finish wall with cap and base as selected)

172. - INSULATING BOARD

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Insulating Board 1/2" thick.

173. - STANDARD PANL BOARD

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Standard PanLBoard 1/4" thick.

174. - DELUXE PANL BOARD

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Deluxe PanLBoard 1/4" thick.

175. - HARDBOARD 1/8"

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Hardboard 1/8" thick.

176. - HARDBOARD 3/16"

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Hardboard 3/16" thick.

177. - HARDBOARD 1/4"

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Hardboard 1/4" thick.

178. - HARDBOARD 5/16"

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Hardboard 5/16" thick.

179. - TEMPERED HARDBOARD 1/8"

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Tempered Hardboard 1/8" thick.

180. - TEMPERED HARDBOARD 3/16"

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Tempered Hardboard 3/16" thick.

181. - TEMPERED HARDBOARD 1/4"

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Tempered Hardboard 1/4" thick.

182. - TEMPERED HARDBOARD 5/16"

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Tempered Hardboard 5/16" thick.

183. - STANDARD FLEXBOARD 1/8"

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Standard Flexboard 1/8" thick.

184. - STANDARD FLEXBOARD 3/16"

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Standard Flexboard 3/16" thick.

185. - DECORATIVE FLEXBOARD

The procedure described in Standard No. 171 shall be observed; the Dry Wall Finish shall consist of J-M Decorative Flexboard 1/8" thick, which shall be nailed with 15 ga. 1" nickle-plated, button head, Helyz, drive-screw nails, approximately 9" c.c. on all bearings.

186. - DRY WALL FINISHES OVER INSULATING BOARD AND
186A. DRY WALL FINISHES OVER PLYWOOD

Where two thicknesses of material are desired to provide either greater structural strength or more effective thermal protection, the first application shall consist of J-M Standard Insulating Board or 5/16" thick Fir Plywood nailed with 4d common nails spaced 6" c.c. on studs and headers directly over studs, in a manner which will "break" joints with the final Dry Wall Finish, which shall be applied in all other respects in conformity with the procedure described in Std. No. 171.

187. - DRY WALL FINISHES OVER FURRING (GENERAL CONDITIONS)

Preparation of Walls (New Work): Where symmetrical or pattern layouts are specified, 1" x 2" Wood Furring Strips shall be applied horizontally by nailing with two 8d nails at each stud. The distance c.c. will depend on the finish material selected and, as a minimum, shall also be spaced to correspond with manufacturer's directions.

Preparation of Walls (Old Work): All Dry Wall Finish products shall be applied over either 1" x 2" or 1/2" x 2" Wood Furring Strips installed horizontally and spaced in accordance with manufacturer's directions for the specific product.

Method of Application: Whether furring strips shall be inserted into channels cut onto the plaster to expose plaster base, or applied directly over existing plaster will depend on whether or not the present base and trim are to be removed and replaced in a manner to properly project beyond the new finished wall surface, or whether the present base and trim is to remain in place. If the latter, then channels, into which 1/2" x 2" furring strips are inserted, are necessary.

Application: Apply horizontal furring approximately 8" c.c. (refer to manufacturer's directions). Furring shall be 1" x 2" for new work and, unless otherwise specified, 1/2" x 2" for application over previously plastered surfaces.

The Dry Wall Finish shall be applied to the height shown on plan and be finished with an appropriate base and cap.

188. - BEVEL PLANK

The procedure described in Standard No. 187 shall be observed; the Dry Wall Finish shall consist of J-M Bevel Plank.

189. - WAINSCOTING PANEL

The procedure described in Standard No. 187 shall be observed; the Dry Wall Finish shall consist of Decorative Insulating Board Wainscoting Panel.

190. - ASHLAR STRIP

The procedure described in Standard No. 187 shall be observed except that the furring shall not exceed 6" c.c.; the Dry Wall Finish shall consist of Decorative Insulating Board Ashlar Strip.

191. - ASBESTOS WAINSCOTING (GENERAL CONDITIONS)

Preparation of Walls (New Work): For new work over stud walls, a first application of J-M Insulating Board as described in Standard No. 186 shall be installed.

Preparation of Walls (Old Work): For old work, application over furring as described in Standard No. 187 shall be observed.

Application: The Contractor shall observe the application directions which are included with each crated shipment, and apply J-M Asbestos Wainscoting on the walls designated on plan or sketch, to the heights shown and finish the wall treatment with appropriate cap and base.

192. - STANDARD TILE DESIGN

The procedure described in Standard No. 191 shall be observed; the Asbestos Wainscoting shall be of J-M Standard Tile Design.

193. - STANDARD PLAIN DESIGN

The procedure described in Standard No. 191 shall be observed; the Asbestos Wainscoting shall be of J-M Standard Plain Design.

194. - MARBLEIZED WAINSCOTING

The procedure described in Standard No. 191 shall be observed; the Asbestos Wainscoting shall be of J-M Marbleized Wainscoting.

195. - COMBINATION PATTERN

The procedure described in Standard No. 191 shall be observed; the Asbestos Wainscoting shall be of J-M Combination Pattern.

196. - STANDARD FLEXBOARD FOR EXTERIOR APPLICATION

Where shown on plans or selected by Owner for dormer sides, gable walls, wall paneling, etc., J-M Standard Flexboard 3/16" thick shall be applied over wood sheathing which has been covered with J-M Asphalt or J-M Asbestos Slater's Felt.

For Porch Ceilings, Cornice and Eave Soffits: It shall be applied directly over properly aligned 2" thick nailing supports spaced not over 16" c.c.

Nailing: Bronze, 1-3/4" face shingle nails shall be spaced not over 3" c.c. on edges and 6" c.c. on intermediate supports.

196. - STANDARD FLEXBOARD FOR EXTERIOR APPLICATION (CONTINUED)

Flashing: Where necessary, or shown on plans, 16 oz. Sheet Copper
Flashing of proper widths shall be installed.

Caulking: J-M Asbestos Caulking putty shall be used to seal all joints.

197. - PARTITIONS (NON-BEARING)

Where shown on plan or selected by Owner, Partitions consisting of 2" x 4" Studs with single top and bottom plate shall be constructed to indicated heights and lengths.

For Partitions built close to masonry in basements and near the eaves in attics, only one side shall be finished with selected dry wall treatment.

Where these partitions separate one usable space from another, both sides shall be finished with Dry Wall Finishes as selected. Joints between sheets shall be covered with appropriate battens and 1" x 6" wood base shall be applied to the finished sides.

198. - INSULATING BOARD

The procedure described in Standard No. 197 shall be observed; the Dry Wall Finish shall be J-M Insulating Board.

199. - HARDBOARD

The procedure described in Standard No. 197 shall be observed; the Dry Wall Finish shall be J-M Hardboard 1/8" thick.

200. - FLEXBOARD

The procedure described in Standard No. 197 shall be observed; the Dry Wall Finish shall be J-M Flexboard 1/8" thick.

201. - CEILINGS

General Conditions: Where shown on plan or selected by Owner, 1" x 2" wood furring shall be applied transversally over existing joists or plastered ceilings, spaced in accordance with the manufacturer's directions for the specified product and covered with a selected type of J-M product in a neat workmanlike manner.

Layout: Before proceeding with application of furring, a careful layout, to assure desired symmetry of panels, equal width of border on each two opposite sides, etc., shall be made.

Note: All necessary electrical wiring and outlets, heating, plumbing or gas line shall be installed, inspected and approved before application of ceiling finish.

202. - STANDARD INSULATING BOARD

The procedure described in Standard No. 201 shall be observed; the ceiling finish shall be of J-M Standard Insulating Board.

203. - STANDARD HARDBOARD 1/8"

The procedure described in Standard No. 201 shall be observed; the ceiling finish shall be of J-M Standard Hardboard 1/8" thick.

204. - STANDARD FLEXBOARD 1/8"

The procedure described in Standard No. 201 shall be observed; the ceiling finish shall be of J-M Standard Flexboard 1/8" thick.

205. - BEVEL PANELS (12" UNITS)

The procedure described in Standard No. 201 shall be observed; the ceiling finish shall be of J-M Bevel Panels (12" Units).

206. - BEVEL PANELS (16" UNITS)

The procedure described in Standard No. 201 shall be observed; the ceiling finish shall be of J-M Bevel Panels (16" Units).

207. - CEILINGS (ATTIC FLAT)

Construction shall consist of collar beams, either 2" x 4" or 2" x 6" depending on span, which shall be installed level and true by spiking them to the rafter sides, and 1" x 4" furring, spaced 16" c.c. for plain sheets or 16" units, and 12" c.c. for 12" units, applied at right angles to ceiling joists, and covered with the selected type of J-M product in a neat workmanlike manner.

208. - STANDARD INSULATING BOARD

The procedure described in Standard No. 207 shall be observed; the ceiling finish shall be of J-M Standard Insulating Board.

209. - STANDARD HARDBOARD 1/8"

The procedure described in Standard No. 207 shall be observed; the ceiling finish shall be of J-M Standard Hardboard 1/8" thick.

210. - STANDARD FLEXBOARD 1/8"

The procedure described in Standard No. 207 shall be observed; the ceiling finish shall be of J-M Standard Flexboard 1/8" thick.

211. - BEVEL PANELS (12" and 16" UNITS)

The procedure described in Standard No. 207 shall be observed; the ceiling finish shall be of J-M Bevel Panels (12" or 16" Units).

212. - CEILINGS (ATTIC INCLINED)

Where shown on plans or selected by Owner, construction shall consist of 1" x 4" furring applied at right angles to the exposed rafters between ceiling joists and "knee" wall, spacing shall be 16" c.c. (with one piece at each angle intersection) for sheet material or 16" units and 12" c.c. for 12" units. The type of J-M product selected shall be nailed to the furring in accordance with manufacturer's directions in a neat, workman-like manner.

213. - INSULATING BOARD

The procedure described in Standard No. 212 shall be observed; the ceiling finish shall be of J-M Insulating Board.

214. - STANDARD HARDBOARD 1/8"

The procedure described in Standard No. 212 shall be observed; the ceiling finish shall be of J-M Standard Hardboard 1/8" thick.

215. - BEVEL PANELS (12" UNITS)

The procedure described in Standard No. 212 shall be observed; the ceiling finish shall be of J-M Bevel Panels (12" Units).

216. - BEVEL PANELS (16" UNITS)

The procedure described in Standard No. 212 shall be observed; the ceiling finish shall be of J-M Bevel Panels (16" Units).

217. - WOOD PANELING (GENERAL CONDITIONS)

Where shown on plans or selected by Owner, wood paneling of the specified type of wood shall be installed at the indicated locations to the required heights in a neat, workmanlike manner.

218. - WOOD PANELING OR PLYWOOD

Depending on type of paneling or Plywood selected, 1"x2" wood furring spaced not over 16" c.c. shall be nailed to studs and paneling applied in accordance with best construction practices. On exterior walls, the back of the paneling shall be primed before application and the space back of paneling between wall studs insulated with J-M Type B Semi-thick Insulation, unless J-M Full-thick is specified for balance of walls.

Joints: Unless tongued and grooved paneling is used, joints shall be covered with beaded panel molding in wood to match.

219. - WOOD PANELING (OLD WORK)

After base is removed, 1" x 2" or 1/2" x 2" wood furring strips not over 16" apart shall be inserted into channels cut into existing plaster and be flush with the finish plaster.

219. - WOOD PANELING (OLD WORK) (CONTINUED)

Present Door and window trim depending on decorative finish shall either be replaced with new or the present trim augmented with "backband" and molding to provide proper trim projection. The removed base shall likewise be replaced with new or neatly refitted.

220. - WOOD PANELING (APPLICATION IN BASEMENTS)

Exterior basement walls shall be treated with one coat of J-M Asphalt Primer and one coat of J-M Asphalt waterproofing cement applied hot-mopped and then a stud wall constructed with 2" x 4" studs 16" c.c. with single plate and sill shall be erected adjacent to the wall, plumb, true and be anchored to the concrete floor and ceiling joists.

1" x 2" furring suitably spaced, not over 16" c.c., shall be installed to serve as nailing support for paneling which shall be protected from dampness with one coat of primer before installation.

221. - FLEXBOARD ACCESSORIES

Depending on Owner's selection, Flexboard shall be installed with Flexboard base, cap, and battens applied in accordance with the manufacturer's directions. For Aluminum Moldings, refer to Standard No. 223. For Bathroom Wall Fixtures, refer to Standard No. 224.

222. - WAINSCOTING ACCESSORIES

Depending on Owner's selection, Asbestos Wainscoting shall be installed with appropriate base and cap inside or outside corner and flat joint moldings either in color to match or in chrome finish. The manufacturer's directions shall determine the method of application. For Bathroom Wall Fixtures, refer to Standard No. 224.

223. - ALUMINUM MOLDINGS

Where selected by Owner, aluminum moldings 1/8" x 8' shall be neatly cut to fit interior wall treatments where 1/8" thick Flexboard or Hardboard are used. Where intersections between moldings occur, they shall be miter-cut, slightly oversize, and be neatly fitted by filing.

224. - BATHROOM WALL FIXTURES

Depending on Owner's selection as to number, type, color and finish; fixtures consisting of towel bars, soap dish, tumbler holder, robe hook, paper holder, glass shelf, etc., shall be neatly installed on wall surfaces in accordance with manufacturer's directions to the height and position indicated on plan, or location determined by Owner.

225. - REMOVAL OF CABINETS, WOOD BASE AND WAINSCOTING

Where required for proper application of new wall treatment, or laying of new floor, existing cabinets, base, base moldings or wood wainscoting including any projecting nails, screws or other obstructions shall be carefully removed and either neatly replaced or, if new units are selected, disposed of according to Owner's direction.

226. - FIRE WALLS AND CEILINGS

The walls and ceilings of garages attached, or built-in, to frame dwellings shall be (unless local code requires additional precaution) covered throughout on the inner side of garage with J-M Steeltex for Stucco and be covered with coats of 1:2 cement plaster to a full thickness of 3/4", finished to a true finish with a wood or cork "float".

227. - MAIN STAIRS (NEW WORK)

General Conditions: All items such as newels, balusters, rail, stringer, risers, treads and moldings shall be of the kind of wood, and of the design as shown on the plan details or in the Outline Specification. All members shall be carefully and accurately assembled in accordance with the detail drawings.

Rough Horses: The stairs shall be supported with "rough horses" cut from not less than 2" x 10" stock, accurately laid out and cut to fit the rise and run shown on the plans.

Stringers: String boards 13/16" thick molded to match base molding shall be accurately laid out, milled, routed and sanded to fit the rise and run of the stairs, shall be accurately fitted to the baseboard at both top and bottom of stairs.

Treads and Risers: Nosed treads 1-1/8" thick and risers 7/8" thick, each in one piece, shall be milled, sanded, dadoed and fitted into routed stringers, securely glued and wedged together. Winder treads shall be made of not more than three pieces properly glued up.

Landing Platform (New or Old Work): The Landing Platform shall be constructed to size shown on plan or provided by stair well with 2" x 6" joists 16" c.c. doubled at ends, secured by spiking to the wall frame members and supported by 2" x 4" uprights.

The height of the platform framing shall be determined by the number of risers which lead to and from it to the end that the "rise" in inches will be uniform for the entire stairway after the landing tread and finished floor are in place.

The finish floor shall correspond in size and kind of wood, with the first or main floor.

227. - MAIN STAIRS (NEW WORK) (CONTINUED)

Newels: Starting and angle newels shall be erected plumb and securely fastened to the stair or platform framing.

Hand Rail: The hand rail of design and wood selected, in continuous lengths from newel to newel, easement, turn, gooseneck, or wall rosette, shall extend from starting newel up the stairs, around stairwell platforms, stair halls, etc. to its logical point of termination in a wall rosette, be carefully fitted, and where joints occur, bolted with handrail bolts.

Balusters: Balusters of design and wood selected shall be uniformly spaced c.c. on treads and landings, set plumb and "dovetailed" into treads. Square balusters shall be fitted into a plowed handrail and held in alignment with fillet-strip inserts between balusters. Turned balusters shall be fitted into holes bored into handrail.

Stairwell Facia: A finished facia board and molding shall be fitted over the joist framing around an open well hole.

Replacement for Old Work: After the present stairs, including rails, balusters, and platform flooring have been removed, new stairs constructed to correct dimensions shall be installed in entire accordance with the procedure outlined above.

Unfinished Attic Stairs (New Work): The stair treads and risers shall be supported with "rough horses" cut from not less than 2" x 10" stock accurately laid out and cut to the rise and run and spiked to the wall frame members.

Stringers: String boards shall be finish lumber accurately cut over the "rough horses" and securely nailed to the plastered wall after the treads and risers are in place.

Treads and Risers: Nosed treads 1-1/8" thick and risers 7/8" thick each in one piece shall be of finish lumber accurately cut, fitted and nailed to the "rough horses". Winder treads shall be made of not more than three pieces properly glued up.

Stairwell Rail: Solid square newels 4" x 4" x 30" with a rail consisting of two pieces of 2" x 3" finish lumber installed horizontally at proper heights shall be built around well hole.

Stairwell Facia: A piece of finish lumber of sufficient width shall be nailed around the well opening.

Unfinished Basement Stairs (New Work): Unfinished basement stairs shall be built in entire accordance with the directions for unfinished Attic Stairs given above.

Protection: When stairs have been completed they shall immediately be primed and then protected by covering the treads and risers with J-M Weathertite building paper until the finish coats are applied.

227. - MAIN STAIRS (NEW WORK) (CONTINUED)

Scuttle: Where shown on plan instead of unfinished attic stairs, an opening cut and framed to correct plan size shall after plaster has set be lined with 1" x 8" interior finish board, trimmed with casing to match trimsets and closed with a removable batten frame covered with plywood, supported on cleats applied to the finish board.

228. - STAIRS TO FINISHED ATTIC (NEW WORK)

Attic Stair construction shall, subject to any modification in kind of wood or pattern, be in accordance with Main Stair construction procedure as outlined in Standard No. 227.

229. - STAIRS TO FINISHED BASEMENT (NEW WORK)

Basement Stair construction shall, subject to any modification in kind of wood or pattern, be in accordance with Main Stair construction procedure as outline in Standard No. 227.

230. - REPLACEMENT ATTIC STAIRS (OLD WORK)

After existing stairs have been carefully removed, attic stairs shall be constructed with "rough horses" cut from not less than 2" x 12" stock, accurately cut to rise and run, leveled, and securely spiked to framing members.

Stringers: String boards shall be finish lumber accurately cut over the "rough horses" and securely nailed to the plastered wall after the treads and risers are in place.

Treads and risers: Nosed treads 1-1/8" thick and risers 7/8" thick each in one piece shall be of finish lumber accurately cut, fitted and nailed to the "rough horses". Winder treads shall be made of not more than three pieces properly glued up.

Stairwell Facia: A finished facia board and molding shall be fitted over the joist framing around an open well hole.

Handrail: Molded hardwood rail 1-5/8" x 2-5/8" shall be carefully fitted to newels and extend in continuous lengths around the stair well opening and terminate in a wall rosette.

Balusters: Soft wood clear 1-1/4" x 1-1/4" x 36" square stock shall be cut to correct length and spaced three per tread or approximately 3" c.c. set plumb and nailed to rail-tread and floor.

Starting newels shall be 6" x 6" x 48" square built up with appropriate cap.

Angle newels shall be 5" x 5" x 66" square with appropriate base and cap.

231. - REPLACEMENT BASEMENT STAIRS (OLD WORK)

Basement stairs shall be constructed to sizes shown on sketch or afforded by available space in entire accordance with Standard No. 230.

232. - REPLACED LANDING PLATFORM (OLD WORK)

After existing platform has been removed, new landing platform shall be constructed in entire accordance with the specification in Standard No. 227.

233. - REPLACED TREADS AND RISERS (OLD WORK)

After existing treads and risers have been removed, new nosed treads 1-1/8" thick and risers 7/8" thick each in one piece shall be of finish lumber accurately cut, fitted and nailed to the "rough horses". Winder treads shall be made of not more than three pieces properly glued up.

234. - REPLACED HAND RAIL AND BALUSTERS (OLD WORK)

After present hand rail and balusters have been removed, new hand rail, balusters and newel posts shall be installed in entire accordance with Standard No. 230.

235. - DISAPPEARING STAIR

At location shown on the plans, a disappearing stair of an approved make and model number, selected for the proper ceiling height, shall be installed in accordance with the manufacturer's directions. Trimmers and headers shall be doubled around the well opening. After installation, the trim, consisting of casing similar to window casing, shall be accurately mitered at corners and neatly fitted around opening.

236. - HARDWARE (ROUGH)

The Contractor shall supply all necessary rough hardware such as nails, spikes, screws, bolts, hooks, etc., as required for proper construction.

237. - HARDWARE (FINISH)

Finish hardware such as locks, knobs, escutcheons, butts, door checks, base or floor knobs, catches, fasteners, pulls, garage door hardware, etc., of material, design, finish and manufacture shall be selected by the Owner.

An Allowance may be noted on the Outline Specification for the purchase of such finish hardware, which shall be subject to the conditions described under "Allowances" in Article XVII.

238. - COAL CHUTE

New Work: Where shown on plan, or selected by Owner, a Steel Coal Chute, approximately 24" x 17" with swinging front, equipped with suitable interior locking device shall be properly set and securely anchored in the foundation. After the foundation is completed, the exposed portions of the chute shall be painted in color to correspond with basement windows or lattice.

Old Work: An opening, of proper size, shall be neatly cut from the exterior side, and the chute inserted, securely anchored and caulked and neatly pointed with cement mortar colored to match the masonry foundation.

239. - STIRRUPS OR JOIST HANGERS

Where shown on plan, demanded by local code or selected by Owner; steel stirrups, of proper size to fit joists shall be installed. Wherever two joists are supported by stirrups on opposite sides of a girder, they shall be "tied" together with a steel strap. Applied in a manner not to interfere with installation of plates or sub-floor.

240. - IRON WORK (MISCELLANEOUS)

Iron gratings, grilles, railing, stairs, stair railings, etc., shall be fabricated to sizes, weights and designs as shown on plan or according to details approved by Owner and be primed with metallic rust inhibitive paint before installation.

241. - WEATHERSTRIPPING (NEW AND OLD WORK)

New Work: Non-ferrous weatherstripping of type selected and approved by Owner shall be neatly installed in accordance with manufacturer's directions, at all exterior windows and doors (including attic and basement openings, unless these are specifically excepted).

Old Work: Existing sash and doors shall be carefully removed and planed to provide adequate clearance to insure smooth, efficient operation at the door or window after the selected weatherstripping has been installed. Any trim which is removed to permit weatherstrip installation shall be carefully replaced with nail holes filled with putty colored to match.

242. - SASH CORD (NEW AND OLD WORK)

New Work: Heavyweight, parafined, braided sash cord shall be cut to proper length required to insure full travel of each sash, and be knotted and secured to fitted sash and weights in a manner to insure smooth non-binding operation.

Old Work: Window stops, parting strip and weight pocket cover shall be carefully removed, and after new cord is in place, be neatly replaced with nail holes filled with putty colored to match.

243. - HOME INSULATION -- TYPE B

J-M Rock Wool Batts, provided with waterproof paper backing wide enough to act as a nailing flange, delivered in unbroken cartons which bear the manufacturer's label, shall be installed in accordance with manufacturer's directions between exterior wall studs, joists or rafters to completely insulate the portion of the building as shown on the drawing or as checked in the Insulation Chart.

The nailing flanges shall be folded as required to enable nailing to the face of studs and sides of rafters and joists, the waterproof paper side of batt shall be next to the interior side of the wall or the under side of the ceiling.

244. - HOME INSULATION -- FUL-THICK

The procedure described in Standard No. 243 shall be observed; the batts shall be Ful-Thick. The J-M Ful-Thick Batts are recommended for insulation under attic roof rafters or ceiling joists at all times.

245. - HOME INSULATION -- SEMI-THICK

The procedure described in Standard No. 243 shall be observed; the batts shall be Semi-Thick.

246. - HOME INSULATION -- TYPE C

J-M Rock Wool Batts, not provided with waterproof paper backing, delivered in unbroken cartons which bear the manufacturer's label, shall be installed in accordance with manufacturer's directions between exterior wall studs, joists or rafters to completely insulate the portion of the building as shown on the drawing or as checked in the Insulation Chart.

On exterior walls, interior walls and rafters, depending on the specified selection from the Insulation Table either 17 lb. J-M Weathertite Building Paper, J-M Hardboard, or Insulating Board shall be applied over the studs or over the bottom rafters.

247. - HOME INSULATION -- TYPE A

J-M Rock Wool supplied in containers bearing the manufacturer's label, shall be installed by the pneumatic method only by approved J-M Home Insulation Contractors, in strict accordance with the manufacturer's recommendations. The minimum depth of Rock Wool installed by the pneumatic method (wall, roof or ceiling space permitting) shall not be less than 3-5/8".

In certain areas where the installation of Rock Wool by the pneumatic method is impracticable, it shall be installed by hand.

247. - HOME INSULATION -- TYPE A (CONTINUED)

Exterior Walls: Type A Insulation is applied from the exterior through holes that are cut by the Insulation Contractor through the sheathing on new jobs, and on old jobs, through the sheathing after removing a portion of the exterior siding (wood, brick, stone or stucco and sheathing). The holes are cut through the sheathing between each stud above and below windows and where necessary, above and below any bracing members or other obstructions in order to insure the complete filling-in of the wall spaces. The cutting and neat repair of all holes and the replacement of siding or other exterior finish material is the responsibility of the Home Insulation Contractor.

248. - PLASTERING (INTERIOR)

Rough Coat: Gypsum hard wall plaster, delivered in unbroken packages, bearing the manufacturer's label, mixed in proportions to correspond with manufacturer's directions, with sharp, coarse sand and clean water, shall be applied (in one or two coats, depending on plaster base selected) to all walls and ceilings to full ground thickness.

After application it shall be rodded and "darbied" or floated to an even, plumb, square and true surface with the edges (approximately 2") around all openings or adjacent to grounds shall be "cut-back" 1/8" to receive finish coat.

Finish Coat: All top coat material shall be delivered in unbroken "branded" packages and mixed and applied in accordance with manufacturer's directions after rough coat is thoroughly dry.

All coves, cornices, interior and exterior corners and ceiling angles shall be true and either level or plumb.

"Feather" edges shall be used to straighten all angles, base and string board areas to insure close fit of wood trim.

During freezing temperatures, temporary heat shall be provided to prevent damage by freezing. (See Article XXII)

During extremely warm temperatures, all windows and doors shall be closed with temporary sash or cheese cloth frames to prevent too rapid "drying out".

After trim is applied, all marred, stained or broken surfaces and cracks, together with unfinished stair soffit and in bathrooms where lower wainscot consists of Ceramic Tile, shall be neatly plastered or repaired so that a clean, workmanlike job results.

Plaster grounds shall be applied around all window, door and built-in cabinet openings and at the base of all partitions and walls to insure a straight, true plaster application.

248. - PLASTERING (INTERIOR) (CONTINUED)

The minimum thickness of the grounds shall be governed by the type of plaster base selected. J-M Steeltex and wood lath shall have 3/4" thick plaster grounds and 1/2" J-M Insulating Board Lath, 1" thick grounds.

At doors and cased openings, grounds 1/2" x 3" or 1/2" x 5-1/4", applied to the 4" face of the stud projecting 3/4" or 1", depending on the plaster base selected, shall be plumbed and gauged to insure correct alignment of finished plaster with door jambs.

Grounds at the base of partitions and walls, around window and built-in cabinet openings, shall be of proper thickness and applied to the edge of the stud.

249. - SMOOTH WHITE LIME FINISH

The procedure described in Standard No. 248 shall be observed; the finish shall consist of Lime Putty and Gauging Plaster mixed in proper proportions applied to an 1/8" thickness and troweled to a smooth, hard surface free from blemishes.

250. - SMOOTH WHITE "NO-LIME" FINISH

The procedure described in Standard Nos. 248 and 249 shall be observed except the finish shall consist of an approved brand "No-Lime Finish".

251. - TEXTURE FINISH

The procedure described in Standard Nos. 248 and either 249 or 250 (depending on Owner's selection) shall be followed except that the finish coat shall be "Textured" to conform with a texture sample which has been previously approved by the Owner.

252. - SAND FINISH (MIXED ON JOB)

The procedure described in Standard No. 248 shall be observed; the finish shall consist of White Lime and White Sand mixed in proper proportions evenly applied to 1/8" thickness and finished to an even, true surface free from blemishes with a cork or carpet-faced "float".

252A.- SAND FINISH (PREPARED)

The procedure described in Standard No. 248 shall be observed; the finish shall consist of White Lime and White Sand mixed in proper proportions evenly applied to 1/8" thickness and finished to an even, true surface free from blemishes with a cork or carpet-faced "float".

253. - KEENE CEMENT

The procedure described in Standard Nos. 248 and 249 shall be observed except that the finish material shall be Keene Cement to which a small proportion of lime putty as recommended by the manufacturer shall be added.

254. - PLASTERING (INTERIOR OVER MASONRY)

Where shown on plan or selected by Owner, cement plaster 1:3:10% minimum shall be applied to interior masonry such as concrete block, common brick or stone walls and floated to a true surface free from unsightly blemishes.

On interior masonry walls, below or above grade, where a Gypsum Finish Top Coat is selected, Gypsum "scratch" and "brown" coats shall be applied to 5/8" grounds and finished in accordance with Std. 248.

255. - CEMENT PLASTER - BELOW GRADE

On exterior Walls, cement plaster, 1:3:10 mix shall be applied in one 1/2" or two 3/8" coats as selected and shall be troweled to a fairly smooth finish free from holes.

256. - EXTERIOR FINISHED PLASTER SURFACES

For exposed finished surfaces, cement plaster shall be applied in two coats, the first "scratched" or left rough, the second carefully rodged and leveled so that all corners, angles and horizontal edges are plumb and level, and the whole surface shall be floated to an even, true surface free from blemishes or float marks.

257. - STEELTEX FOR STUCCO

General Conditions: All exterior walls, where designated "Stucco", shall be covered with J-M Steeltex for Stucco which is furnished in either rolls of 50 sq. yds. (49" wide by 110-1/2 ft. long) or sheets 49" x 52".

Application: Steeltex for Stucco shall be applied horizontally over studs or sheathing on new work, or over existing siding in case of "overcoating" old work. Nail 6" c.c. on every stud with Steeltex Furring Nails. Start at sill line, lapping Steeltex around corners, "toe-nail" at corner of mesh to stretch fabric taut, and apply continuously over openings, which are cut out later. Lap the second course 3/4", wire to wire, with no fibrous backing between. Lap vertical joints 1" wire to wire. Avoid vertical joints at corners, under or over openings or between studs. Cut Steeltex around the inside of window or door openings after the strip has been applied and fully nailed. (For stucco application refer to Standard No. 61.)

Note: The grounds for application of stucco shall be 3/4" thick.

258. - STEELTEX FOR BRICK OR STONE VENEER

The General Conditions and Application Directions as outlined in Standard No. 257 shall be followed except that all exterior walls for brick or stone veneer shall be covered with Steeltex for Brick or Stone Veneer.

259. - STEELTEX PLASTER BASE

All interior walls, partitions and ceilings, where plaster is specified shall be lathed with J-M Steeltex for Plaster which shall be attached to

259. - STEELTEX PLASTER BASE (CONTINUED)

studs with 4d common wire or box nails, and to ceiling joists with 6d nails into each stud or joist. All joints shall be staggered on both ceilings and sidewall. End laps shall be 1" and side laps 1/2". Lathing of ceiling shall start at a corner, bending the first sheet for Steeltex at the ceiling angle to make a 6" drop or apron down the sidewall. Sidewalls shall be lathed from ceiling down so that all horizontal laps are made over top sheets. Refer to manufacturer's directions.

Over Interior Masonry: Masonry walls shall be furred with 1" x 2" furring spaced 16" c.c. and Steeltex shall be applied as described above.

259A.- EXPANDED METAL LATH

Expanded Metal Lath (3.4 lbs. sq. yd.) either painted or galvanized as selected shall be applied at right angles to existing framing or furring and nailed or stapled not over 6" c.c. on all bearing members. Where necessary, tie wires shall be used to connect the sheet laps between framing members.

260. - J-M SELF-FURRING WELDED WIRE REINFORCEMENT (C-214)

Over unpainted common brick, concrete block or other masonry surfaces where the fibrous Steeltex backing is unnecessary, J-M Self-Furring Welded Wire Reinforcement may be applied directly to the masonry wall surface with hardened steel pointed drive-screw nails not over 16" c.c. in both directions or 4d galvanized nails driven into plugs which have been inserted into previously drilled holes. The application of cement plaster shall conform with Standard No. 61.

261. - INSULATING LATH

Insulating Lath, a rigid, structural insulation, is furnished in two sizes, 18" x 48" and 24" x 48", 1/2" thick. The long edges of the sheets are shiplapped.

Insulating Lath shall be nailed horizontally (with coarse texture exposed,) over framing or furring spaced 16" c.c. with all end joints broken. The shiplapped sides shall be closely joined and end joints shall be spaced approximately 1/4" apart. Moistening of the lath prior to application of plaster is not required. Nailing directions issued by the manufacturer shall be observed.

261A.- ROCK LATH

Rock Lath, 16"x48"x3/8", shall be applied horizontally over framing or furring spaced 16" c.c. with joints broken and nailed in accordance with manufacturer's directions.

262. - METAL CORNER BEAD

A metal corner bead shall be installed plumb and true on every outside corner angle, unless a "bull-nose" corner effect, using J-M Steeltex, is desired.

263. - WALL AND CEILING ANGLE REINFORCING

At all interior wall and ceiling angles J-M Corner Reinforcing bent to form a 3" x 3" angle, shall be installed over J-M Insulating Board lath or Wood lath, and securely nailed into the framing members. (Reinforcing is not required for J-M Steeltex.)

264. - WOOD LATH

No. 1 Wood Lath, 3/8"x1-1/2"x48", spaced 1/4" minimum to 3/8" maximum apart, joints broken every seventh lath, nailed at every bearing with 3d blued lath nails, shall be applied to all interior walls and ceilings where plaster is indicated on the plan.

Lath shall not extend from one room to another, nor be applied vertically. All angles shall be solidly backed up with nailing supports before applying lath. Lath on all walls shall extend down to the floor.

265. - PLASTER ARCHES

Metal arches of the radius indicated on the drawings shall be installed for all interior plastered arch openings and the connecting vertical outside corners shall be reinforced with metal corner bead.

266. - FLOOR TILE (CERAMIC)

Old Work: Cover old floor or sub-floor with J-M Steeltex for Stucco. Nail this with self-furring galvanized nails according to manufacturer's directions. After nailing, spread a 3/4" thick coat of cement mortar, rod and float to an even surface and proceed to lay floor tile as described under "Setting Tile".

New Work: For tile floors, the sub-floor to support the concrete base shall be installed not less than 3" below the top edge of the floor joists and laid on 1" x 2" furring strips nailed on sides of champferred joists. Install 1:3:5 concrete base 2-1/2" thick mixed in proportions with a minimum of water to make a firm mixture when tamped.

Setting Tile: When concrete base has set, dampen surface, sprinkle lightly with dry Portland Cement, carefully spread a 1" coat of 1:2 cement mortar, rod and float to an even, level surface. Carefully set tile in place, fit snugly to maintain a uniform joint. After several sheets or individual tile are laid, lay a flat board on top and tap lightly until tile are even and level.

When the tile paper backing is removed, carefully fit any necessary fractional size pieces.

Marble Threshold: A marble threshold shall be furnished and installed at all door openings where tile and wood floors meet. (For location, size, pattern color, border, etc., refer to the Outline Specifications.)

Protecting Finished Tile Floor: After tile has been cleaned, damp sawdust shall be sprinkled over the surface and the room closed to traffic until the tile has thoroughly set.

267. - WALL TILE (CERAMIC)

Between studs, install nailing cleats for fixtures. Attach 3/4" grounds around base and all openings. Cover areas to be tiled with Steeltex for Stucco as described in Std. No. 257. Apply scratch coat of cement mortar, which is to be well scored and allow to set and dry before setting tile.

The wall tile cap and base shall be of the size and color as selected by the Owner and shall be installed to the height specified on the plans or in the Outline Specification with the necessary interior and exterior corners, lips, cover, etc.

All wall tile shall be thoroughly soaked in water and be set plumb, level and square with uniform joints. On completion the tile walls shall be thoroughly cleaned, removing all traces of excess mortar.

268. - TILE ACCESSORIES

Coincidentally with the setting of the wall tile, the accessories as selected in the Outline Specification shall be built into their proper locations in the room for which they are specified. Indicate the room location, design, kind and color or finish of the accessories desired. Refer to Std. No. 224.

269. - GUTTERS - METAL

Metal Gutters provided with miter-corners, outlet tubes and caps of the size, design and kind of material as specified on plan or selected on chart shall be installed with suitable hangers, spaced three feet c.c. and properly pitched. (1/8" L.F.)

Galvanized half-round single bead gutters may be of the slip-joint type. Molded galvanized box or "Ogee" gutters and all copper gutters shall be lapped 1" and soldered. All outlet tubes shall be flanged, soldered to the eaves trough and provided with a removable wire strainer.

270. - LEADERS OR DOWNSPOUTS

Leaders of the size, design and kind of material specified, provided with elbows and other fittings, shall connect with the outlet tubes and terminate either with a shoe 3" above grade line and spill onto a 18" x 36" concrete or stone splash block, be connected to dry wells (Refer to Std. No. 283) or, if permitted by local code, connected with the sewer. The selection indicated on the Outline Specification shall govern. Leaders shall be soldered with the inside edge of the joint down, and the leader secured with hooks or ornamental straps, minimum spacing 4'0" c.c. or according to plan. Leader heads shall be of the size and design shown on the plan.

Connection to Dry Wells: Dry wells or storm sewer connections, if specified, shall start with tile or cast iron drain pipe extending 3" above the finished grade line, into which the leader ends shall be inserted and cemented with J-M Asbestos Caulking Putty. (Refer to Standard No. 283.)

271. - FLASHINGS AND TERMITE SHIELDS

General Conditions: All flashings shall be of copper, zinc, lead, tin or galvanized iron, with joints lapped in the direction of the water flow and soldered with resin flux. Valley flashings shall have the edges folded to form a 1/2" selvage, to provide a water stop. Where specific size is not stated on plan, refer to Selection Chart for minimum gauges of metal and width of flashing.

Window and Exterior Door Head Flashing: Window and exterior Door Frame Heads shall be flashed in one continuous strip of proper width metal flashing as specified on the plans or on the Outline Specification. The flashing (under the finished sidewall) shall extend 3" up the wall, and project slightly over drip cap edge.

Window Sill Flashing: Where window sills rest on roof, install a metal "pan" (Refer to Outline Specification) to fit under and 1" up on the inside of the sill, 2" up on the side of the studs and 4" down on the roof.

Counter Flashing: Counter flashing where required or indicated, shall extend 4" under siding or shingles, be nailed 8" c.c. or 8" up on masonry wall, be inserted 1" in mortar joint as described in Standard No. 272 and be turned down over base flashing not less than 4".

Termite Shields: Non-ferrous metal flashing in widths sufficient to permit flanges to extend on both sides of the masonry or wood construction in accordance with local code or F.H.A. Minimum Construction Requirements shall be installed with joints soldered to provide a continuous termite barrier.

272. - CHIMNEY FLASHING

Step-flash progressively with metal flashing shingles, as specified on plans or in Outline Specification. Bend each shingle to extend at least 8" up the chimney side and 6" on the roof deck and nail firmly in place. Next, apply counter-flashing to extend at least 6" over the step-flashing. Rake out mortar joints in the chimney 1", insert the bent edge of the counter-flashing and wedge it with two metal wedges per brick; point up open mortar joints with J-M Asbestos Caulking Putty.

273. - CHIMNEY SADDLE OR CRICKET

Where shown on plan or selected by Owner, chimneys located so that their high side will receive excessive water or drift snow from the roof slope, a "saddle", "gusset", or "cricket" of roof boards shall be installed. Cover the "saddle", with metal flashing to extend at least 6" up the main roof and 8" on the chimney. Step-flash progressively with each course of roof shingles and counter-flash as specified in Standard No. 271.

274. - ELECTRIC WIRING (GENERAL CONDITIONS)

Due to the multiplicity of codes, laws and ordinances which govern the installation of Electric Service and Wiring, the purpose of this Trade Standard is to outline minimum specifications which shall be adhered to

274. - ELECTRIC WIRING (GENERAL CONDITIONS) (CONTINUED)

except where they may conflict with the local or state codes, laws or ordinances in which case the local requirements shall take precedence for the particular item or items in question.

New Homes: The work shall be construed to include all material and labor required for the furnishing and installing of a complete electric system, with outlets as shown on plans or specified in the Outline Specification.

Home Improvements: The work shall be construed to install new outlets or change the location of present outlets, which shall be connected to the existing system in a neat, workmanlike manner. Where the addition of outlets to an existing circuit will cause an overload or conflict with local or national codes or regulations which was not estimated or included in the original agreement, the Contractor shall submit charge for extra labor and material required to install a separate circuit and obtain Owner's approval before proceeding with work.

Permits and Inspection Fees: The Contractor shall obtain and pay for all permits, arrange for necessary inspections and furnish to the Owner or Architect a Final Inspection Certificate from the Local, State or National Authorities which exercise local jurisdiction, including the National Board of Underwriters.

Temporary Service: The Contractor shall make application for temporary power service when needed and pay for current consumed and any other service charges. When submitting the building to the Owner for final acceptance, the Contractor shall submit a receipted service invoice.

Permanent Service: In connection with the application for permanent service (which usually requires a deposit to be held in escrow by the power company) the Contractor shall arrange all details concerning such application, obtain receipts for meter deposit in Owner's name, and the Owner, when taking possession, shall reimburse the Contractor the full amount of such deposit.

Note: It is understood that electric service is available at the Owner's property. In connection with bringing the service into the building, the amount of labor and material to be furnished by the Contractor shall be governed by the Power Company's regulations.

Wiring Materials: All wiring materials shall be new, of an approved make and shall bear the National Board of Electrical Underwriter's label.

Fixtures and Bulbs (New Homes): The Owner shall select all fixtures and bulbs in accordance with the number of fixtures provided in Electric Table. An allowance shall be included in the Construction Estimate and inserted in the Outline Specification subject to conditions specified under "Allowances" in the Articles and Conditions. XVII.

Fixtures and Bulbs (Home Improvements): Unless specifically made part of the estimate and listed in the Outline Specification and in the Agreement, the Owner shall select, purchase and deliver to the Contractor any fixtures or bulbs which may be required.

274. - ELECTRIC WIRING (GENERAL CONDITIONS) (CONTINUED)

Switches and Service or Plug-in Outlets: Unless otherwise specified, these shall be furnished by the Contractor. The Owner shall select and approve the type of switch, plug receptacle and cover plate finish.

Hanging Fixtures: The Contractor shall hang the electric fixtures in their proper locations, insert and test bulbs and switches before final acceptance.

275. - OUTLETS

The number and type of outlets shown on plans or specified in the Table shall be completely installed at points designated on the plans or in accordance with Owner's instructions.

276. - GARAGE SERVICE (OVERHEAD)

Garage service shall consist of an overhead three-wire system installed in complete accordance with General Conditions Standard No. 274 which will enable the installation and operation of a set of three-way switches to control the outdoor garage entrance light. A garage control switch and fuse block shall be provided and located in the house to enable the garage to be completely disconnected if desired.

277. - GARAGE SERVICE (UNDERGROUND)

Garage service shall consist of a three-wire lead-sheathed cable installed in an underground approved electrical conduit in complete accordance with General Conditions Standard No. 274 which will enable the installation and operation of a set of three-way switches to control the outdoor garage entrance light. A garage control switch and fuse block shall be provided and located in the house to enable the garage to be completely disconnected if desired.

278. - PAINTING (GENERAL CONDITIONS)

All paint, varnish, filler, or stain, shall be of nationally known quality manufacture, delivered in unopened containers, bearing the manufacturer's label and be applied in strict accordance with manufacturing directions which shall include dilution with oil, or thinner, the period between coats and the number of coats.

All surfaces to be painted shall be dry, free from dust, grease, oil or wax.

All exterior painting shall be applied only in clear weather and when temperature is not below 40° F.

All iron, tin or sheet metal work shall be wire brushed to remove all traces of loose rust, scale, solder flux or other impediments.

All woodwork shall be firm, knots primed with aluminum paint or shellac, nails set and surfaces sanded and brushed to remove splinters, dust, etc.

Nail holes shall be filled with white lead putty or approved crack and crevice filler after priming coat has been applied and dried.

All cement, plaster or brick surfaces that are to be painted shall be at least 30 days old and then be treated with zinc sulphate solution (3-1/2 lbs. per gallon of water) in successive coats until zinc sulphate crystals appear on surface, after which surface is to be brushed to remove excess sulphate and primed according to manufacturer's directions.

278. - PAINTING (GENERAL CONDITIONS) (CONTINUED)

All wax, oil or grease shall be carefully removed by washing with alcohol, benzine, turpentine or "painter's thinner".

*Number of Coats (New Work): Depending on surface, product and Owner's selection, either two or three coats of paint shall be applied over new wood siding and trim. Where two coat work is selected, the product shall be identified by label and manufacturer's directions as being suitable and efficient for two coat application.

Exterior

| | |
|--------------------------|-------------|
| Wood Siding and Trim | Three Coats |
| **J-M Standard Flexboard | " " |
| J-M Hardboard | " " |
| Brick or Masonry Walls | " " |
| Wood Shingles - painted | " " |
| *Wood Siding and Trim | Two Coats |
| Wood Shingles - stained | " " |
| Fir Gutters - inside | " " |
| Sheet Metal - ferrous | " " |
| Iron Work | " " |

Interior

| | |
|-------------------------------------|-------------|
| Wood, trim, floor, Cabinets, etc. | Three Coats |
| (For Hardwood, add Filler or | Four Coats |
| Plaster or Masonry) | Three Coats |
| J-M Standard Flexboard | " " |
| J-M Hardboard | Two Coats |
| J-M Insulating Board (Glazed) | " " |
| All Interior Enamel | |
| (3 under-coats, 1 enamel Flexboard) | Four Coats |

**J-M Asbestos Products for exterior application where paint finish is desired or specified, shall be primed in accordance with manufacturer's directions.

Number of Coats (Old Work): The number of coats over old work as well as the extent shall be indicated on sketch or plan by notes and checked in the Selection Chart.

Application: All work shall be done in a neat workmanlike manner, with good brushes, well-stirred paint and an absence of unsightly laps, brush marks, smudges or spots. Adequate drop cloths to protect other surfaces from spots particularly on interior applications, shall be provided. Caution shall be exercised in placing ladders and scaffold to avoid damage to existing shrubs, trees, plants, etc., and also not to harm adjacent property or encroach upon it without Owner's permission.

Cold water paints for brick or masonry surfaces shall be applied in accordance with manufacturer's directions.

All open grain hard wood shall receive a coat of liquid or paste filler before finishing coats are applied.

278. - PAINTING (GENERAL CONDITIONS) (CONTINUED)

Painting Around Glass: Paint shall be "cut in" neatly; if glass is smudged or spotted, it shall be cleaned before final acceptance.

Painting Old Work: The same general precautions for dryness and cleanliness shall be observed; in addition, any blistered or scaled paint shall be removed by wire brushing, scraping or blow-torch depending on its condition.

All bare surfaces shall be "spot" primed before regular prime coat is applied. Any loose boards shall be firmly nailed. Any badly split or decayed boards shall be replaced, nails set, nail holes puttied, gutters, leaders, shutters, cornice, porch columns, steps, rails, balusters, etc., inspected and renailed or fastened securely. All sash shall be inspected and reputtied where existing putty is loose.

279. - EXTERIOR PAINTING (NEW WORK)

Where shown on plans or selected by Owner, exterior paints shall be applied in a manner to strictly conform with the appropriate portions of the General Conditions Standard No. 278. The finishes and colors for the various surfaces shall be selected by paint manufacturer's numbers where possible or by color specimens submitted by Contractor and approved by Owner before work is begun.

280. - EXTERIOR PAINTING (OLD WORK)

Where shown on plans or selected by Owner, exterior paints shall be applied in a manner to strictly conform with the appropriate portions of the General Conditions Standard No. 278. The finishes and colors for the various surfaces shall be selected by paint manufacturer's numbers where possible or by color specimens submitted by Contractor and approved by Owner before work is begun.

281. - INTERIOR PAINTING (NEW WORK)

Where shown on plans or selected by Owner, interior paints shall be applied in a manner to strictly conform with the appropriate portions of the General Conditions Standard No. 278. The finishes and colors for the various surfaces shall be selected by paint manufacturer's numbers where possible or by color specimens submitted by Contractor and approved by Owner before work is begun.

282. - INTERIOR PAINTING (OLD WORK)

Where shown on plans or selected by Owner, interior paints shall be applied in a manner to strictly conform with the appropriate portions of the General Conditions Standard No. 278. The finishes and colors for the various surfaces shall be selected by paint manufacturer's numbers where possible or by color specimens submitted by Contractor and approved by Owner before work is begun.

283. - PLUMBING (GENERAL CONDITIONS -- NEW WORK)

Due to the multiplicity of codes, laws and ordinances which govern the installation of plumbing work, the purpose of this Trade Standard is to outline minimum specifications which shall be adhered to except where they may conflict with a local code or F.H.A. Minimum Construction Requirements in which case the requirement shall take precedence for the particular item or items in question.

Work Included: The work described in this Trade Standard shall be construed to include all material and labor required for the excavation, backfilling, furnishing, delivering and installing a complete plumbing system.

Permits: The contractor shall obtain and pay for all permits, inspection fees, and certificates as may be required by the Local Authorities.

Tests: The contractor shall make any and all tests as may be required by the Local Authorities.

Cooperation: The plumbing contractor shall cooperate with and assist all other trades by performing his work in a manner and at such times so as not to delay or interfere with the progress of any other craft.

Excavation: The contractor shall provide for the excavation, shoring and backfilling of all trenches required for the proper laying of the sewer, water and gas pipes, both inside and outside of the building. Any pavements, walks or driveways, damaged by trench excavation, shall be satisfactorily repaired.

Trenches: The trenches shall be excavated to the necessary depth, providing an even bottom of hard earth. When laying the sewer pipe, the earth under the bells shall be dug out to insure that the pipe rests for its entire length upon the bottom of the trench.

Rock Excavation: Should rock or shale be encountered during the trench excavation, making blasting necessary, it shall be brought to the attention of the Owner or Architect before proceeding, and when warranted, a written order, covering the additional cost of this work, shall be agreed to between the parties. After this has been done, the trench shall be excavated approximately 6" below the grade of the bottom of the pipes. The space between the rock and the pipe shall be filled with earth, properly tamped, providing an even bearing surface the entire length of the line. No rock fill shall be used immediately adjacent to the pipe.

Drainage System: The drainage system shall be constructed of cast iron pipe, bell and spigot type, of the size and weight required by the local code. The system shall connect with the street sewer, septic tank or cesspool, as determined by local conditions and indicated in the Outline Specification, and shall extend with necessary fittings to reach all branch lines for fixtures, vent stack, floor, areaway and basement entrance drains; (when permitted by code, if rain leaders are specified, they shall be connected to drainage system).

283. - PLUMBING (GENERAL CONDITIONS -- NEW WORK) (CONTINUED)

Dry Wells: Dry wells to receive rain leaders shall be located at least 8'0" from foundation wall, and constructed to sizes shown on plan or the minimum requirements (whichever is largest) established by local code, which shall also determine the depth and type of construction.

Dry well shall be connected to down spout by 4" drain salt glazed bell and spigot type drain pipe, with all joints caulked with oakum and portland cement mortar. Pipe shall be at least 12" below grade at its highest point and pitch toward dry well $1/4"$ per lin. ft.

Septic Tanks: Septic tanks shall be constructed to a size ample for 6 to 8 persons and the overflow shall be connected with a drainage bed of submerged drain tile laid in branch or grid form and consisting of at least 150 lin. ft. of drain tile and conform to local code or governing authority.

The location of septic tank shall be at least 25'0" distant from foundation wall.

The construction, size, material, depth, baffle chambers, etc. shall conform to the local code.

Branch Lines: Depending upon local custom and code, branch lines shall be either cast iron, galvanized malleable iron pipe with drainage fittings or lead pipe with "wiped" joints.

Soil Line Assembly: All horizontal cast iron soil lines shall be correctly installed and provided with proper supports, with a minimum pitch of $1/4"$ per foot of run over the entire length. Two supports shall be provided for each length of pipe in a horizontal run and one for each length of pipe placed vertically.

Cast Iron Pipe Joints: Cast iron pipe joints shall be made with sufficient fresh oakum, tightly caulked inside the bell, and then covered with molten lead to fill bell and well caulked.

Threaded Pipe Connections: Joints in galvanized malleable iron or brass pipe shall have clean cut threads, inside of pipe reamed to full diameter, assembled with threaded fittings and made up with red lead, litharge or joint cement.

Cleanouts: Brass ferrule screw plug type cleanouts shall be provided at points to make horizontal runs accessible. A cleanout shall be placed at the foot of the vent stack.

Stack Roof Flashing: At the roof each stack shall be flashed with a heavy, sheet lead collar, which shall be counter-flashed with sheet lead flashing. The collar shall extend 4" above the roof line, and the joint between collar and pipe shall be "peened" and caulked with J-M Caulking Putty.

Sleeves: Where a soil line passes through masonry a sheet metal sleeve, large enough to freely admit the pipe, shall be inserted. After the soil line installation has been completed, any space between the sleeve and pipe shall be caulked with J-M Caulking Putty.

283. - PLUMBING (GENERAL CONDITIONS -- NEW WORK) (CONTINUED)

Water Supply: The Owner shall provide the source of water supply, either in the street immediately adjacent to the premises on which the building is to be erected, or a well on the premises located within 50 feet of the building site. The responsibility of the Contractor shall be limited to connecting to the water supply. Where the water supply is in the street, the amount of work to be done by the Contractor in extending it to the foundation shall be governed by local custom and the regulations of the Water Company.

Water Service Main: The water service shall be installed in a trench below freezing point and shall be at least 1-1/4" lead pipe or copper tubing, unless otherwise required by code, with a curb box and a "Tee" head brass shut-off valve.

Water Supply Inside Building: The hot and cold water supply pipes shall be of galvanized malleable iron, brass or copper tubing, with fittings as approved by local code, properly pitched and equipped with "Tees" or valves to permit all water supply pipes to be drained. Riser pipes shall be 3/4" diameter if of galvanized malleable iron, or may be 1/2" diameter if of brass pipe or copper tubing. A hot water supply pipe shall be connected from storage tank and hot water heater to all fixtures, except water closet. A cold water supply line shall be connected with all fixtures. Two sill cocks shall be placed as shown on the plans, or at Owner's or Architect's directions.

Valves: All control valves shall be brass of standard gate or compression type. There shall be one on the main supply line where it enters the basement, one on each hot and cold water riser, and two at the hot water storage tank, which shall also be fitted and equipped with an automatic relief valve and a brass sediment cock.

Gas Supply: It shall be the Owner's responsibility to have the gas service available in the street immediately adjacent to the building site. Depending upon the regulation of the local gas company, a 1-1/4" black malleable iron pipe gas line shall be installed to connect with the kitchen gas range, gas hot water heating coil or any other gas appliances included in the specifications. In connection with the amount of work to be done by the Contractor in regard to the gas service, this shall be governed by local custom and gas company regulations.

Tank Service: If tank gas is used, this shall be a separate transaction between the Owner and the company providing service. The Contractor shall connect to the tank service pipe which shall extend inside of the foundation wall.

Plumbing Fixtures: All plumbing fixtures shall be selected by the Owner and the plate numbers, size, color, etc., shall be inserted on the Outline Specification. All fixtures shall be carefully handled, stored and installed in their proper locations as shown on the plans, and shall be in perfect condition after installation. Supply pipes and waste connections shall be made tight and installed to the wall or floor as indicated in the Outline Specification.

284. - PLUMBING FIXTURE ALLOWANCE

Depending upon the type, quantity and quality of the plumbing fixtures and equipment such as water softeners, automatic heaters and fittings selected, an Allowance may be noted on the Outline Specification and included in the Construction Estimate. This allowance shall cover the selection of all items and is subject to conditions specified under "Allowances", Article XVII.

285. - SHOWERS

Over Built-in Tubs: Where shown on plans or selected by Owner, a chromium plated, brass shower head with mixing valve of approved type or make, together with a chromium plated brass rod, equipped with heavy duck shower curtain, suspended on roller-type hangers, shall be installed with built-in bath tubs.

Piping for Showers: All pipes shall be concealed and the shower mechanism shall be accessible through an access door, located according to plans.

286. - SHOWER STALLS

Depending on the type selected, shown on plan or selected by Owner, shower stalls shall be installed in accordance with dimensions shown on plans, manufacturer's directions and local code requirements. When the stall is constructed on the site it shall be equipped with a lead pan and all joints shall be permanently sealed to prevent leakage.

287. - PLUMBING (OLD WORK)

Plumbing Fixture Removal and Replacement: The application of new wall treatments in bathrooms, lavatories, laundrys and kitchens will necessitate the temporary removal and replacement of plumbing fixtures. Where described by plan notes or selected by Owner, the Contractor shall shut off water supply lines to the fixtures affected, remove the fixture, temporarily "plug" or cap the open service outlets, and turn on the water supply.

The fixture wall support brackets shall be removed and after the new wall treatment is in place the support brackets shall be re-installed and the fixture reset, properly connected with the supply and waste lines and tested. Any nipples, washers, gaskets, or other fittings required to effect this replacement shall be furnished by the Contractor.

288. - NEW FIXTURES (REPLACEMENTS)

Where the Owner selects new fixtures to replace the present ones, the Contractor shall carefully check the "roughing-in" measurements of the new fixture, compare them with the existing ones and make any changes which may be required for proper connections before the new wall treatment is started.

289. - NEW WASHERS

Where selected by Owner, fixtures shall be equipped with new washers and tested for performance.

290. - HEATING (GENERAL CONDITIONS -- NEW WORK)

Depending on the locality and Owner's selection, an approved heating system, either vapor, hot water, steam or warm air, with thermostatic draft control, shall be properly installed in accordance with any existing local codes or ordinances and have a heating capacity sufficient to maintain 70° F. inside the house when the outside temperature is either 10° below zero, zero, or 10° above zero.

All vapor steam or hot water heating pipes shall be covered with J-M Asbestocel Pipe Covering. On those pipes which extend into exterior walls which are filled with J-M Home Insulation, the pipe covering may be omitted, but the heating pipes must be placed in the wall next to the plaster.

The entire heating plant and all automatic equipment shall be thoroughly tested, checked and inspected under operation at the time of completion of the entire installation. (If the work is completed during hot weather, final acceptance shall be deferred until normal test can be made).

For selection of heating system, furnace, radiators, registers and automatic equipment, refer to the Outline Specification.

291. - HEATING (OLD WORK)

Radiator Removal and Replacement: The application of new wall treatments will often necessitate the temporary removal of steam, vapor, or hot water radiators. Where described by plan notes or selected by Owner, the Contractor shall either "bank" or dump any coal fire or temporarily disconnect any automatic heating unit, wait until steam or vapor pressure is "down" or if it is a hot water system, drain the lines well below the affected radiators, temporarily "cap" or "plug" the heat supply outlets, and after the new wall treatment is in place, reconnect the radiators and test them. Any fittings, nipples, washers or gaskets necessary to effect proper replacement shall be furnished by the Contractor.

292. - NEW RADIATORS

Where Owner selects new radiators to replace present ones, the Contractor shall carefully check the new radiator measurements against existing outlets and make any changes, including "plugging" holes in floor, etc. before new wall treatment is installed, the radiator shall (if free standing) be primed, and given a first coat before setting or connecting.

293. - DORMERS BUILT ON EXISTING HOMES

General Conditions: Where shown on plan or selected by Owner, the Contractor shall construct dormers by carefully removing existing roof covering 12" larger than the affected area, cut opening through exposed roof boards to the exact size of the inner dormer framing dimensions on both sides, and 3-3/4" longer at each end, plumb cut and remove rafters

293. - DORMERS BUILT ON EXISTING HOMES (CONTINUED)

to this latter dimension, install double headers (same width as rafters) at each end which shall be securely "spiked" to common rafters on each side of the cut opening and cut rafter ends, install side plates (same width as rafters) at each side of cut opening, spike to headers and nail cut ends of roof board to side plate.

Proceed to frame Dormer proper to dimensions as shown on plan, with 2" x 4" studs 16" c.c., 2" x 6" rafters 16" c.c. and cover with wood sheathing and roof boards laid tight. Install 12" J-M Copper Coated Asphalt Flashing around entire contact edge of dormer with roof and replace balance of removed roofing in a workmanlike manner. Install frames and sash, complete with weights and sash cord, and sash lock. Install cornice with fascia and "crown" mold. Apply 30 lb. J-M Asphalt Saturated Felt over roof boards and sheathing. Apply finish roofing, siding in accordance with plans or Owner's selection.

Protection: It shall be the Contractor's responsibility to protect the work under construction in a manner which will avoid any water damage being caused by leaks.

Painting: All exposed finished wood work including frames, blinds, cornice, trim, siding (if wood siding is selected) shall be painted in accordance with Standard No. 278.

Interior Finish: Depending on plans or Owner's selection, interior of dormers shall be finished with either plaster, J-M Insulating Board, Standard or Decorative Flexboard or Hardboard. The window shall be trimmed and wood base mold to correspond with balance of trim shall be installed.

294. - LIFT TYPE OR SHED ROOF DORMERS

These shall be constructed to widths shown on plan or selected by Owner in complete accordance with the General Conditions outlined in Standard No. 293.

295. - GABLE TYPE DORMERS

These shall be constructed to widths shown on plan or selected by Owner in complete accordance with the General Conditions outlined in Standard No. 293.

296. - HIP TYPE DORMERS

These shall be constructed to widths shown on plan or selected by Owner in complete accordance with the General Conditions outlined in Standard No. 293.

297. "COMBINATION" TREATMENTS (GENERAL CONDITIONS)

The Trade Standards which follow are the assembly of some preceding Trade Standards which have been appropriately combined considering the various units involved to provide quickly a combined specification for standard treatments such as Foundation Walls complete with footings, dampproofing, cement plaster, etc.

Outside Walls composed of studding, sheathing, building paper and outside wall finishes.

Roofs consisting of roof rafters, roof boards, roof covering, etc.

Flooring consisting of joists, sub-flooring, building paper and finish flooring.

Plaster consisting of plaster base, scratch, brown, and finish coat.

Doors consisting of door jambs, door trim and hardware complete.

Windows consisting of frame, sash, hardware, sash cord, trim, etc.

Partitions consisting of studs, plaster base and finished plaster on two sides, finished with wood base, etc.

Each of the combinations will list the Trade Standard Nos. of which it is composed and will have direct reference to such Trade Standards. The conditions governing the construction or application of the product in question which apply as fully as if each of them were individually selected on the individual Outline Specifications. The primary purpose of these combinations is to simplify the selection of standard specifications for the Owner, accelerate the task of making quantity survey and estimates, and reducing the customary obstacles in providing optional prices.

298. FOUNDATION WALLS CONCRETE

Consisting of Footing Forms in accordance with Std. 63, Wall Forms - Std. 64, Concrete Footings - Std. 18, Concrete Wall - Std. 19.

Based on unit wall 7'0" high, 10'0" long, 8" thick.

299. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. No. 298 except 10" thick.

300. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. No. 298 except 12" thick.

300A. FOUNDATION WALLS CONCRETE

Walls 8" thick to correspond with Std. No. 298 based on a unit wall 2'4" high.

300B. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. No. 300A except 10" thick.

300C. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. No. 300A except 12" thick.

300D. FOUNDATION WALLS CONCRETE WITHOUT FOOTINGS

Walls 8" thick to correspond with Std. 298 without footings, based on unit wall 3'0" high.

301. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. No. 298 except made with Integrally Water-proofed Cement - Dampproofing "A" - Std. 24, 8" thick.

302. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 301 except 10" thick.

303. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 301 except 12" thick.

304. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 298 except made with J-M Concrete Primer and Standard Asphalt Waterproofing Cement - Dampproofing "F" - Std. 24, 1 coat of each, 8" thick.

305. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 304 except 10" thick.

306. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 304 except 12" thick.

307. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 298 except plastered with two 3/8" coats of Integrally waterproofed Cement Plaster - Dampproofing "C" - Std. 24, 8" thick.

308. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 307 except 10" thick.

309. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 307 except 12" thick.

310. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 304 but made with Integrally Waterproofed Concrete - Dampproofing "A" and "F" - Std. 24, 8" thick.

311. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 310 except 10" thick.

312. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 310 except 12" thick.

313. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. No. 307 but made with Integrally Waterproofed Concrete - Dampproofing "A" and "C" - Std. 24, 8" thick.

314. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 313 except 10" thick.

315. FOUNDATION WALLS CONCRETE

Walls to correspond with Std. 313, except 12" thick.

316. FOUNDATION WALLS CONCRETE BLOCK

Complete Basement Walls 7'0" high consisting of appropriate width Footing Forms - Std. 63, Concrete for Footings - Std. 18, concrete block laid in cement mortar - Std. 20. The wall shall be of 6" block.

317. FOUNDATION WALLS CONCRETE BLOCK

Walls to correspond with Std. 316 except that wall shall be of 8" block.

318. FOUNDATION WALLS CONCRETE BLOCK

Walls to correspond with Std. 316 except that wall shall be of 10" block.

319. FOUNDATION WALLS CONCRETE BLOCK

Walls to correspond with Std. 316 except that wall shall be of 12" block.

319A. FOUNDATION WALLS CONCRETE BLOCK

Walls of 6" block to correspond with Std. No. 316, based on wall 3 block or approximately 2'8" high.

319B. FOUNDATION WALLS CONCRETE BLOCK

Walls of 8" block to correspond with Std. No. 316, based on wall 3 block or approximately 2'8" high.

320. FOUNDATION WALLS CONCRETE BLOCK

Walls to correspond with Std. 316 but plastered one side with two 3/8" coats of Integrally Waterproofed Cement Plaster - Dampproofing "C" - Std. 24, 6" block.

321. FOUNDATION WALLS CONCRETE BLOCK

Walls to correspond with Std. 320 except that wall shall be of 8" block.

322. FOUNDATION WALLS CONCRETE BLOCK

Walls to correspond with Std. 320 except that wall shall be of 10" block.

323. FOUNDATION WALLS CONCRETE BLOCK

Walls to correspond with Std. 320 except that wall shall be of 12" block.

324. OUTSIDE WALL

Outside Frame Walls, Balloon Type in heights as shown on plan shall be constructed with 2"x4" studs, 16" c.c. - Std. 72, 1"x6 " D & M Sheathing in accordance with Std. 83, covered with 15 lb. J-M Asphalt Felt in accordance with Std. 88.

Platform Type: Construction to correspond with above except that framing shall be of Platform Type - Std. 73.

324A. OUTSIDE WALL

Outside Frame Walls, Balloon Type in heights as shown on plan shall be constructed with 2"x4" studs, 16" c.c. - Std. 72, J-M Structural Insulating Board Sheathing 25/32" thick - Std. 87. covered with 15 lb. J-M Asphalt Felt in accordance with Std. 88.

Platform Type: Construction to correspond with above except that framing shall be of platform Type Std. 73.

325. OUTSIDE WALL - ASBESTOS CLAPBOARD

Wall construction to correspond with Std. 324 and to be finished with J-M Asbestos Clapboard - Std. 115.

326. OUTSIDE WALL - ASBESTOS SHINGLES

Wall construction to correspond with Std. 324, and to be finished with 105-U Gray Asbestos Shingles - Std. 115.

327. OUTSIDE WALL - ASBESTOS SHINGLES

Wall construction to correspond with Std. 324 and to be finished with 105-U Oyster White Asbestos Shingles - Std. 115.

328. OUTSIDE WALL - ASBESTOS SHINGLES

Wall construction to correspond with Std. 324 and to be finished with 106-U Gray Asbestos Shingles - Std. 115.

329. OUTSIDE WALL - ASBESTOS SHINGLES

Wall construction to correspond with Std. 324 and to be finished with 106-U Oyster White Asbestos Shingles - Std. 115.

330. OUTSIDE WALL - ASBESTOS SHINGLES

Wall construction to correspond with Std. 324 and to be finished with 107-U Gray Asbestos Shingles - Std. 115.

331. OUTSIDE WALL - ASBESTOS SHINGLES

Wall construction to correspond with Std. 324 and to be finished with 107-109-U Oyster White Asbestos Shingles - Std. 115.

332. OUTSIDE WALL - ASBESTOS SHINGLES

Wall construction to correspond with Std. 324 and to be finished with 105-T Gray Asbestos Shingles - Std. 115.

333. OUTSIDE WALL - ASBESTOS SHINGLES

Wall construction to correspond with Std. 324 and to be finished with 105-T Oyster White Asbestos Shingles - Std. 115.

334. OUTSIDE WALL - ASBESTOS SHINGLES

Wall construction to correspond with Std. 324 and to be finished with 107-T Gray Asbestos Shingles - Std. 115.

335. OUTSIDE WALL - ASBESTOS SHINGLES

Wall construction to correspond with Std. 324 and to be finished with 107-109-T Oyster White Asbestos Shingles - Std. 115.

336. OUTSIDE WALL - WOOD BEVEL SIDING

Wall construction to correspond with Std. 324 and to be finished with 1/2"x4" Wood Bevel Siding - Std. 118, and 3 coats of paint - Std. 279.

336A. OUTSIDE WALL - WOOD BEVEL SIDING

Wall construction to correspond with Std. 324A and to be finished with 1/2"x 4" Wood Bevel Siding - Std. 118, and 3 coats of paint - Std. 279.

337. OUTSIDE WALL - WOOD BEVEL SIDING

Wall construction to correspond with Std. 324 and to be finished with 1/2"x 6" Wood Bevel Siding - Std. 118, and 3 coats of paint - Std. 279.

337A. OUTSIDE WALL - WOOD BEVEL SIDING

Wall construction to correspond with Std. 324A and to be finished with 1/2"x 6" Wood Bevel Siding - Std. 118, and 3 coats of paint - Std. 279.

338. OUTSIDE WALL - WOOD BEVEL SIDING

Wall construction to correspond with Std. 324 and to be finished with 3/4"x 8" Wood Bevel Siding - Std. 118 and 3 coats of paint - Std. 279.

338A. OUTSIDE WALL - WOOD BEVEL SIDING

Wall construction to correspond with Std. 324A and to be finished with 3/4"x 8" Wood Bevel Siding - Std. 118, and 3 coats of paint - Std. 279.

339. OUTSIDE WALL - WOOD BEVEL SIDING

Wall construction to correspond with Std. 324 and to be finished with 3/4"x10" Wood Bevel Siding - Std. 118, and 3 coats of paint - Std. 279.

339A. OUTSIDE WALL - WOOD BEVEL SIDING

Wall construction to correspond with Std. 324A and to be finished with 3/4"x10" Wood Bevel Siding - Std. 118, and 3 coats of paint - Std. 279.

340. OUTSIDE WALL - WOOD BEVEL SIDING

Wall construction to correspond with Std. 324 and to be finished with 3/4"x12" Wood Bevel Siding - Std. 118 and 3 coats of paint - Std. 279.

340A. OUTSIDE WALL - WOOD BEVEL SIDING

Wall construction to correspond with Std. 324A and to be finished with 3/4"x12" Wood Bevel Siding - Std. 118, and 3 coats of paint - Std. 279.

341. OUTSIDE WALL - WAVY BUNGALOW SIDING

Wall construction to correspond with Std. 324 and to be finished with 3/4"x8" Wavy Bungalow Siding - Std. 118 and 3 coats of paint - Std. 279.

341A. OUTSIDE WALL - WAVY BUNGALOW SIDING

Wall construction to correspond with Std. 324A and to be finished with 3/4"x8" Wavy Bungalow Siding - Std. 118 and 3 coats of paint - Std. 279.

342. OUTSIDE WALL - WAVY BUNGALOW SIDING

Wall construction to correspond with Std. 324 and to be finished with 3/4"x10" Wavy Bungalow Siding - Std. 118 and 3 coats of paint - Std. 279.

342A. OUTSIDE WALL - WAVY BUNGALOW SIDING

Wall construction to correspond with Std. 324A and to be finished with 3/4"x10" Wavy Bungalow Siding - Std. 118 and 3 coats of paint - Std. 279.

343. OUTSIDE WALL - WAVY BUNGALOW SIDING

Wall construction to correspond with Std. 324 and to be finished with 3/4"x12" Wavy Bungalow Siding - Std. 118 and 3 coats of paint - Std. 279.

343A. OUTSIDE WALL - WAVY BUNGALOW SIDING

Wall construction to correspond with Std. 324A and to be finished with 3/4"x12" Wavy Bungalow Siding - Std. 118 and 3 coats of paint - Std. 279.

344. OUTSIDE WALL - DROP SIDING

Wall construction to correspond with Std. 324 and to be finished with 1"x6" Drop Siding - Std. 118 and 3 coats of paint - Std. 279.

344A. OUTSIDE WALL - DROP SIDING

Wall construction to correspond with Std. 324A and to be finished with 1"x6" Drop Siding - Std. 118 and 3 coats of paint - Std. 279.

345. OUTSIDE WALL - DROP SIDING

Wall construction to correspond with Std. 324 and to be finished with 1"x8" Drop Siding - Std. 118 and 3 coats of paint - Std. 279.

345A. OUTSIDE WALL - DROP SIDING

Wall construction to correspond with Std. 324A and to be finished with 1"x8" Drop Siding - Std. 118 and 3 coats of paint - Std. 279.

345B. OUTSIDE WALL (SOUTHWESTERN CONSTRUCTION) - DROP SIDING

Outside Frame Walls, Balloon Type shall be constructed (Southwestern Construction) with 2"x4" studs, 16" c.c. - Std. 72, 1"x6" D & M Sheathing applied horizontally on the interior and covered with 1 lb. J-M Deadening Felt - Std. 88. Exterior surface covered with 15 lb. J-M Saturated Asphalt Felt - Std. 88 and 1"x6" Drop Siding - Std. 119 and 2 coats of paint Std.279.

345C. OUTSIDE WALL (SOUTHWESTERN CONSTRUCTION) - DROP SIDING

Walls to correspond with Std. 345B except exterior surface shall be finished with 1"x8" Drop Siding - Std. 119 and 2 coats of paint - Std. 279.

346. OUTSIDE WALL - WOOD SHINGLES

Wall construction to correspond with Std. 324 and to be finished with Natural Wood Shingles 16", 5 to 2", 5" exp. - Std. 119 and 2 coats stain - Std. 279.

347. OUTSIDE WALL - WOOD SHINGLES

Wall construction to correspond with Std. 324 and to be finished with Natural Wood Shingles 16", 5 to 2", 7" exp. - Std. 119 and 2 coats stain - Std. 279.

348. OUTSIDE WALL - WOOD SHINGLES

Wall construction to correspond with Std.324 and to be finished with Natural Wood Shingles 18", 5 to 2 $\frac{1}{4}$ ", 5 $\frac{1}{2}$ " exp. - Std. 119 and 2 coats stain - Std. 279.

349. OUTSIDE WALL - WOOD SHINGLES

Wall construction to correspond with Std.324 and to be finished with Natural Wood Shingles 18", 5 to 2 $\frac{1}{4}$ ", 8" exp. - Std. 119 and 2 coats stain - Std.279.

350. OUTSIDE WALL - WOOD SHINGLES

Wall construction to correspond with Std.324 and to be finished with Natural Wood Shingles 24", 4 to 2", 10" exp. - Std. 119 and 2 coats stain - Std.279.

351. OUTSIDE WALL - WOOD SHINGLES

Wall construction to correspond with Std. 324 and to be finished with factory pre-stained shingles 16", 5 to 2", 5" exp. - Std. 119.

352. OUTSIDE WALL - WOOD SHINGLES

Wall construction to correspond with Std. 324 and to be finished with factory pre-stained Shingles 16", 5 to 2". 7" exp. - Std. 119.

353. OUTSIDE WALL - WOOD SHINGLES

Wall construction to correspond with Std. 324 and to be finished with factory pre-stained shingles 18", 5 to 2 $\frac{1}{4}$ ", 5 $\frac{1}{2}$ " exp. - Std. 119.

354. OUTSIDE WALL - WOOD SHINGLES

Wall construction to correspond with Std. 324 and to be finished with factory pre-stained shingles 18", 5 to 2 $\frac{1}{4}$ ", 8" exp. - Std. 119.

355. OUTSIDE WALL - WOOD SHINGLES

Wall construction to correspond with Std. 324 and to be finished with factory pre-stained shingles 24", 5 to 2", 10" exp.-Std. 119.

OUTSIDE WALLS - STDS. 356 to 372

356. STUCCO OVER STEELTEX

Walls to be constructed with 2" x 4" Studs (Balloon Frame) - Std. 72, J-M Steeltex for Stucco - Std. 257, finished with 7/8" thick Standard Gray Cement Stucco - Std. 61.

357. STUCCO OVER STEELTEX

Wall construction to correspond with Std. 356 and to be finished with White or Colored Finish Coat - Std. 61.

358. STUCCO OVER STEELTEX AND SHEATHING

Walls shall be constructed with 2" x 4" Studs - Stds. 72-73, 1" x 6" Diagonal Sheathing - Std. 83, J-M Steeltex for Stucco - Std. 257, finished with 7/8" thick Standard Gray Cement Stucco - Std. 61.

358A. STUCCO OVER STEELTEX AND SHEATHING

Walls to be construction to correspond with Std. 358 except J-M Structural Insulating Board Sheathing 25/32" thick - Std. 87, shall be used instead of 1" x 6" D & M Wood Sheathing.

359. STUCCO

Wall construction to correspond with Std. 358 and to be finished with White or colored Finish Coat.

359A. STUCCO

Wall construction to correspond with Std. 358A and to be finished with White or colored Finish Coat.

OUTSIDE WALLS - STDS. 356 to 372 (Continued)

360. COMMON BRICK VENEER OVER STEELTEX

Walls finished with Brick Veneer over Steeltex shall be constructed with 2" x 4" Studs - Std. 72, J-M Steeltex for Brick Veneer - Std. 258, Common Brick - Std. 41, and Plain Mortar - Std. 17.

(Where required by Code, add 1" x 6" D & M Sheathing - Std. 83.)

Note: When Brick Veneer is selected, Foundation Wall size shall be increased from 8" to 12" in thickness.

361. COMMON BRICK VENEER OVER STEELTEX

Wall to correspond with Std. 360 except that Colored Mortar shall be used.

362. FACE BRICK VENEER OVER STEELTEX

Wall construction to correspond with Std. 360 and to be finished with Face Brick Veneer - Std. 41 and Plain or Colored Mortar - Std. 17.

363. 4" STONE VENEER OVER STEELTEX

Wall construction to correspond with Std. 360 and to be finished with 4" Stone Veneer - Std. 45.

364. 6" STONE VENEER OVER STEELTEX

Wall construction to correspond with Std. 360 and to be finished with 6" Stone Veneer - Std. 45.

365. COMMON BRICK VENEER OVER INSULATING BOARD

Walls finished with Brick Veneer over J-M Insulating Board shall be constructed with 2" x 4" Studs - Stds 72-73, J-M Insulating Board - Std. 84, Common Brick - Std. 43, and Plain or Colored Mortar - Std. 17.

366. FACE BRICK VENEER OVER INSULATING BOARD

Wall construction to correspond with Std. 365 and to be finished with Face Brick Veneer - Std. 43.

367. 4" STONE VENEER

Wall construction to correspond with Std. 365 and to be finished with 4" Stone Veneer - Std. 46.

368. 6" STONE VENEER

Wall construction to correspond with Std. 365 and to be finished with 6" Stone Veneer - Std. 46.

369. BRICK VENEER OVER WOOD SHEATHING

Walls finished with Brick Veneer over Wood Sheathing shall be constructed with 2" x 4" Studs - Std. 72, 1" x 6" D & M Diagonal Sheathing - Std. 83, 15 lb. J-M Asphalt Felt - Std. 88, with Common Brick - Std. 44.

OUTSIDE WALLS - STDS. 356 to 372 (Continued)

370. BRICK VENEER OVER WOOD SHEATHING

Wall construction to correspond with Std. 369 and to be finished with Face Brick.- Std. 44.

371. 4" STONE VENEER OVER WOOD SHEATHING

Wall construction to correspond with Std. 369 and to be finished with 4" Stone Veneer - Std. 47.

372. 6" STONE VENEER OVER WOOD SHEATHING

Wall construction to correspond with Std. 369 and to be finished with 6" Stone Veneer - Std. 47.

373. ROOF CONSTRUCTION

Roofs shall be constructed with 2" x 6" Rafters 16" c.c. - Std. 80, 1" x 6" D & M Boards laid tight - Std. 87, and J-M 15 lb. Asphalt Felt - Std. 88, to be covered with selected shingles.

374. ASBESTOS SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with No. 30 Dutch Lap 1/4 Lap, Mottled Green - Std. 104.

375. ASBESTOS SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with No. 30 Dutch Lap 1/4 Lap, other colors - Std. 104.

376. ASBESTOS SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with No. 30 Dutch Lap 1/3 Lap, Mottled Green - Std. 104.

377. ASBESTOS SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with No. 30 Dutch Lap 1/3 Lap, other colors - Std. 104.

378. ASBESTOS SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with No. 70 Hexagonal, Mottled Green - Std. 104.

379. ASBESTOS SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with No. 70 Hexagonal, other colors - Std. 104.

380. ASBESTOS SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with No. 35 Salem American Method, Mottled Green - Std. 104.

381. ASBESTOS SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with No. 35 Salem American Method, -other colors - Std. 104.

381A. ASBESTOS SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with No. 507 J-M Asbestos Cedargrain Roofing Shingles - Std. 104.

382. STARTERS FOR NO. 70 SHINGLES

Starters for Asbestos Shingles shall be applied in accordance with application directions issued by the manufacturer.

Use No. 17 Starter and No. 71 Eaves Starter for No. 70 Hexagonal - Std. 104.

383. STARTERS FOR NO. 35 SHINGLES

Application of Starter to correspond with Std. 382.

Use No. 36 Starter for No. 35 Salem American Method - Std. 104.

384. STARTERS FOR NO. 30 SHINGLES

Application of Starter to correspond with Std. 382.

Use No. 31 Eaves Starter for No. 30 Dutch Lap (Eaves) - Std. 104.

385. STARTERS FOR NO. 507 SHINGLES

Application of Starter to correspond with Std. 382.

Use No. 536 Starter for No. 507 Cedargrain Shingles - Std. 104.

386. HIP AND RIDGE SHINGLES FOR NO. 30, NO. 70 and NO. 507 SHINGLES

Hips and Ridges for Asbestos Shingles shall be applied in accordance with application directions issued by the manufacturer.

Use No. 97 for No. 30 or No. 70 Shingles and No. 597 for No. 507 Cedargrain Shingles.

387. HIP AND RIDGE SHINGLES FOR NO. 35 SHINGLES

Application of Hips and Ridges to correspond with Std. 386.

Use No. 37 for No. 35 Shingles.

388. RIDGE ROLL FOR ANY ASBESTOS SHINGLE

Where required, or selected by Owner, Ridge Roll shall be applied in strict accordance with the manufacturer's directions.

389. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 12-1/3" Giant Hex - Std. 106.

390. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 12-1/3" Standard Hex - Std. 106.

391. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 11-1/3" Standard Hex - Std. 106.

392. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 12-1/2" Double Coverage Hex - Std. 106.

393. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 12" Double Coverage Hex - Std. 106.

394. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 12" Giant Strip - Std. 106.

395. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 10" Standard Strip - Std. 106.

396. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 12-1/2" Standard Strip - Std. 106.

397. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 12" Double Coated Strip - Std. 106.

398. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 15" Double Coated Strip - Std. 106.

399. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 12" Standard Thick Butt - Std. 106.

400. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 363 and to be covered with 12" Giant Individual - Std. 106.

401. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 9" Standard Individual - Std. 106.

402. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 12" Latch Thatch - Std. 106. (Discontinued)

403. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 16" Weatherlok - Std. 106.

404. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 12" Giant Dutch Lap - Std. 106.

405. ASPHALT SHINGLE ROOFS

Roof construction to correspond with Std. 373 and to be covered with 12" Standard Dutch Lap - Std. 106.

406. ASPHALT HIP AND RIDGE SHINGLES

Asphalt Hip and Ridge Shingles and Starters shall be applied in strict accordance with the application directions issued by the manufacturer.

407. ROOF CONSTRUCTION

Roofs shall be constructed with 2" x 6" Rafters 16" c.c. - Std. 80 and 1" x 6" D & M Roof Boards - Std. 87, to be covered with selected sheet or roll roofing.

408. ASBESTOS SLATE ROLL

Roof construction to correspond with Std. 407 and to be covered with Asbestos Slate Roll - 85 lb.

409. ASBESTOS SMOOTH ROLL

Roof construction to correspond with Std. 407 and to be covered with Asbestos Smooth Roll - 66 lb.

410. ASPHALT SMOOTH ROLL

Roof construction to correspond with Std. 407 and to be covered with J-M Pilot, Extra heavy - 65 lb.

411. ASPHALT SMOOTH ROLL

Roof construction to correspond with Std. 407 and to be covered with J-M Service, Extra heavy - 75 lb.

412. ASPHALT SLATEKOTE

Roof construction to correspond with Std. 407 and to be covered with J-M Slatekote - 90 lb.

413. COPPER ROOFS

Roof construction to correspond with Std. 407 and to be covered with 24 ga. 16 oz. sheets 12" x 48" Copper, flat seam - Std. 114.

414. TIN ROOFS

Roof construction to correspond with Std. 407 and to be covered with 12" x 20" Tin, flat seam - Std. 114, including 2 coats metal paint.

415. GALVANIZED IRON ROOFS

Roof construction to correspond with Std. 407 and to be covered with Galvanized Iron, flat seam - Std. 114, including 2 coats metal paint.

416. CANVAS DECKS

Roof construction to correspond with Std. 407 and to be covered with 14 oz. canvas, nailed with copper nails and treated with three coats of Floor and Deck Enamel - Std. 279.

417. SLATE ROOFS

Roof construction to correspond with Std. 407 and to be covered with slate size 8" x 16" x 3/16" Bangor Ribbon No. 1.

418. SLATE ROOFS

Roof construction to correspond with Std. 407 and to be covered with Bangor No. 1 Clear.

419. WOOD SHINGLES OVER TIGHT ROOF BOARDS

Roofs shall be constructed with 2" x 6" Rafters 16" c.c. - Std. 80 and 1" x 6" D & M Roof Boards laid on tight - Std. 87, and to be covered with selected Wood Shingles.

Covering to be of 16", 5 to 2" Natural, Wood Shingles, (Exposed 4-1/2").

420. WOOD SHINGLES OVER TIGHT ROOF BOARDS

Roof construction to correspond with Std. 419 and to be covered with 16", 5 to 2" Stained, Wood Shingles, (Exposed 4-1/2").

421. WOOD SHINGLES OVER TIGHT ROOF BOARDS

Roof construction to correspond with Std. 419 and to be covered with 16", 5 to 2" Natural, Wood Shingles, (Exposed 5").

422. WOOD SHINGLES OVER TIGHT ROOF BOARDS

Roof construction to correspond with Std. 419 and to be covered with 16", 5 to 2" Stained, Wood Shingles, (Exposed 5").

423. WOOD SHINGLES OVER TIGHT ROOF BOARDS

Roof construction to correspond with Std. 419 and to be covered with 18", 5 to 2-1/4" Natural, Wood Shingles, (Exposed 5").

424. WOOD SHINGLES OVER TIGHT ROOF BOARDS

Roof construction to correspond with Std. 419 and to be covered with 18", 5 to 2-1/4" Stained, Wood Shingles, (Exposed 5").

425. WOOD SHINGLES OVER TIGHT ROOF BOARDS

Roof construction to correspond with Std. 419 and to be covered with 18", 5 to 2-1/4" Natural, Wood Shingles, (Exposed 5-1/2").

426. WOOD SHINGLES OVER TIGHT ROOF BOARDS

Roof construction to correspond with Std. 419 and to be covered with 18", 5 to 2-1/4" Stained, Wood Shingles, (Exposed 5-1/2").

427. WOOD SHINGLES OVER TIGHT ROOF BOARDS

Roof construction to correspond with Std. 419 and to be covered with 24", 4 to 2" Natural, Wood Shingles, (Exposed 10").

428. WOOD SHINGLES OVER TIGHT ROOF BOARDS

Roof construction to correspond with Std. 419 and to be covered with 24", 4 to 2" Stained, Wood Shingles, (Exposed 10").

429. ROOF CONSTRUCTION WITH SPACED ROOF BOARDS

Roofs shall be constructed with 2" x 6" Rafters 16" c.c. - Std. 80 and 1" x 4" Roof Boards spaced 2" apart, and be covered with selected Wood Shingles.

430. WOOD SHINGLES OVER SPACED ROOF BOARDS

Roof construction to correspond with Std. 429 and be covered with 16", 5 to 2" Natural, Wood Shingles, (Exposed 4-1/2").

431. WOOD SHINGLES OVER SPACED ROOF BOARDS

Roof construction to correspond with Std. 429 and be covered with 16", 5 to 2" Stained, Wood Shingles, (Exposed 4-1/2").

432. WOOD SHINGLES OVER SPACED ROOF BOARDS

Roof construction to correspond with Std. 429 and be covered with 16", 5 to 2" Natural, Wood Shingles, (Exposed 5").

433. WOOD SHINGLES OVER SPACED ROOF BOARDS

Roof construction to correspond with Std. 429 and be covered with 16", 5 to 2" Stained, Wood Shingles, (Exposed 5").

434. WOOD SHINGLES OVER SPACED ROOF BOARDS

Roof construction to correspond with Std. 429 and be covered with 18", 5 to 2-1/4" Natural, Wood Shingles, (Exposed 5").

435. WOOD SHINGLES OVER SPACED ROOF BOARDS

Roof construction to correspond with Std. 429 and be covered with 18", 5 to 2-1/4" Stained, Wood Shingles, (Exposed 5").

436. WOOD SHINGLES OVER SPACED ROOF BOARDS

Roof construction to correspond with Std. 429 and be covered with 18", 5 to 2-1/4" Natural, Wood Shingles, (Exposed 5-1/2").

437. WOOD SHINGLES OVER SPACED ROOF BOARDS

Roof construction to correspond with Std. 429 and be covered with 18", 5 to 2-1/4" Stained, Wood Shingles, (Exposed 5-1/2").

438. WOOD SHINGLES OVER SPACED ROOF BOARDS

Roof construction to correspond with Std. 429 and be covered with 24", 4 to 2" Natural, Wood Shingles, (Exposed 10").

439. WOOD SHINGLES OVER SPACED ROOF BOARDS

Roof construction to correspond with Std. 429 and be covered with 24", 4 to 2" Stained, Wood Shingles, (Exposed 10").

440. FLOOR CONSTRUCTION

Floors shall be constructed with 2" x 8" joists 16" c.c. - Std. 70, 1" x 6" D & M sub-floor laid diagonal - Std. 86, 15 lb. J-M Asphalt Felt - Std. 88, and covered with selected flooring.

441. FIR FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Flat Grain 3-1/4" Fir - Std. 121.

442. FIR FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Flat Grain 2-3/8" Fir - Std. 121.

443. FIR FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Edge Grain 3-1/4" Fir - Std. 121.

444. FIR FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Edge Grain 2-3/8" Fir - Std. 121.

445. YELLOW PINE FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Flat Grain 3-1/4" Yellow Pine - Std. 121.

446. YELLOW PINE FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Flat Grain 2-3/8" Yellow Pine - Std. 121.

447. YELLOW PINE FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Edge Grain 3-1/4" Yellow Pine - Std. 121.

448. YELLOW PINE FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Edge Grain 2-3/8" Yellow Pine - Std. 121.

449. MAPLE FLOORING

Floor joist construction to correspond with Std. 440 and be covered with 2-1/4" Maple - Std. 121.

450. RED PLAIN OAK FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Plain 2-1/4" Red Oak - Std. 121.

451. WHITE PLAIN OAK FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Plain 2-1/4" White Oak - Std. 121.

452. RED QUARTERED OAK FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Quartered 2-1/4" Red Oak - Std. 121.

453. WHITE QUARTERED OAK FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Quartered 2-1/4" White Oak - Std. 121.

454. RED PLAIN OAK FLOORING (NARROW WIDTH)

Floor joist construction to correspond with Std. 440 and be covered with Plain 1-1/2" Red Oak - Std. 121.

455. WHITE PLAIN OAK FLOORING (NARROW WIDTH)

Floor joist construction to correspond with Std. 440 and be covered with Plain 1-1/2" White Oak - Std. 121.

456. RED OAK RANDOM PLANK "V" JOINT FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Random Width V-joint Red Oak - Std. 123.

457. WHITE OAK RANDOM PLANK "V" JOINT FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Random Width V-joint White Oak - Std. 123.

458. RED OAK RANDOM PLANK TIGHT JOINT FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Random Plain Red Oak - Std. 123.

459. WHITE OAK RANDOM PLANK TIGHT JOINT FLOORING

Floor joist construction to correspond with Std. 440 and be covered with Random Plain White Oak - Std. 123.

460. LINOLEUM FLOORING

Floor construction to correspond with Std. 441 and be covered with Linoleum in accordance with Std. 126.

461. CERAMIC TILE FLOORING

Floors shall be constructed with 2" x 8" joist 16" c.c. - Std. 70, 1" x 2" Furring - Std. 79, 1" x 6" D & M Sub-floor - Std. 85, 2-1/2" Concrete Slab - Std. 19, and 1" Top Coat - Std. 17.

462. PORCH FLOORING

Porch floors shall be constructed with 2" x 8" joists - Std. 71, 1-1/2" x 2-1/4" Edge Grain Fir Flooring - Std. 125 with 3 coats Floor and Deck Enamel - Std. 279.

463. PORCH FLOORING

Porch Floors shall be constructed with 2" x 6" joists - Std. 71, 1-1/4" x 3-1/4" Edge Grain Fir Flooring - Std. 125 with 3 coats Floor and Deck Enamel - Std. 279.

463A. SOUTHWESTERN CEILING CONSTRUCTION

Ceiling shall be constructed with 2" x 6" ceiling joists, 16" c.c. - Std. 70 with 1" x 6" D & M Sheathing - Std. 82 applied on the underside to provide a solid board surface for the application of J-M 1 lb. Deadening Felt-Std. 88.

464. INTERIOR ROUGH COAT PLASTER OVER WOOD LATH

Interior rough coat shall be applied over wood lath in accordance with Stds. 248 and 264 (two coat work).

464A. INTERIOR PLASTER OVER WOOD LATH

Interior plaster shall be applied in accordance with Std. 464. The Finish Coat shall be White Lime Finish - Finish I - Std. 249.

465. INTERIOR PLASTER OVER WOOD LATH

Interior plaster shall be applied in accordance with Std. 464. The Finish Coat shall be "No Lime" Finish - Finish II - Std. 250.

466. INTERIOR PLASTER OVER WOOD LATH

Interior plaster shall be applied in accordance with Std. 464. The Finish Coat shall be Sand Finish (Job Mix) - Finish III - Std. 252.

466A. INTERIOR PLASTER OVER WOOD LATH

Interior plaster shall be applied in accordance with Std. 464. The Finish Coat shall be Sand Finish (Prepared) - Finish IV - Std. 252A.

467. INTERIOR PLASTER OVER WOOD LATH

Interior plaster shall be applied in accordance with Std. 464. The Finish Coat shall be Texture Finish - Finish VI - Std. 251.

468. INTERIOR PLASTER OVER WOOD LATH

Interior plaster shall be applied in accordance with Std. 464. The Finish Coat shall be Keene Cement - Finish V - Std. 253.

469. INTERIOR ROUGH COAT PLASTER OVER INSULATING BOARD LATH

Interior rough coat shall be applied in accordance with Stds. 248 and 261 (two coat work).

469A. INTERIOR PLASTER OVER J-M INSULATING BOARD LATH

Interior plaster shall be applied in accordance with Std. 469. The Finish Coat shall be White Lime Finish - Finish I - Std. 249.

470. INTERIOR PLASTER OVER J-M INSULATING BOARD LATH

Interior plaster shall be applied in accordance with Std. 469. The Finish Coat shall be "No Lime" Finish - Finish II - Std. 250.

471. INTERIOR PLASTER OVER J-M INSULATING BOARD LATH

Interior plaster shall be applied in accordance with Std. 469. The Finish Coat shall be Sand Finish (Job Mix) - Std. 252.

471A. INTERIOR PLASTER OVER J-M INSULATING BOARD LATH

Interior plaster shall be applied in accordance with Std. 469. The Finish Coat shall be Sand Finish (Prepared) - Std. 252A.

472. INTERIOR PLASTER OVER J-M INSULATING BOARD LATH

Interior plaster shall be applied in accordance with Std. 469. The Finish Coat shall be Texture Finish - Finish VI - Std. 251.

473. INTERIOR PLASTER OVER J-M INSULATING BOARD LATH

Interior plaster shall be applied in accordance with Std. 469. The Finish Coat shall be Keene Cement - Finish V - Std. 253.

473A. INTERIOR ROUGH COAT PLASTER OVER ROCK LATH

Rough coat shall be applied in accordance with Stds. 248 and 261A (two coat work).

473B. INTERIOR PLASTER OVER ROCK LATH

Interior plaster shall be applied in accordance with Std. 473A. The Finish Coat shall be White Lime Finish - Finish I - Std. 249.

473C. INTERIOR PLASTER OVER ROCK LATH

Interior plaster shall be applied in accordance with Std. 473A. The Finish Coat shall be "No Lime" Finish - Finish II - Std. 250.

473D. INTERIOR PLASTER OVER ROCK LATH

Interior plaster shall be applied in accordance with Std. 473A. The Finish Coat shall be Sand Finish (Job Mix) - Finish III - Std. 252.

473E. INTERIOR PLASTER OVER ROCK LATH

Interior plaster shall be applied in accordance with Std. 473A. The Finish Coat shall be Sand Finish (Prepared) - Finish IV - Std. 252A.

473F. INTERIOR PLASTER OVER ROCK LATH

Interior plaster shall be applied in accordance with Std. 473A. The Finish Coat shall be Texture Finish - Finish VI - Std. 251.

473G. INTERIOR PLASTER OVER ROCK LATH

Interior plaster shall be applied in accordance with Std. 473A. The Finish Coat shall be Keene Cement - Finish V - Std. 253.

474. INTERIOR ROUGH COAT PLASTER OVER STEELTEX

Interior rough coat shall be applied in accordance with Std. 248 and 259 (two coat work).

474A. INTERIOR PLASTER OVER STEELTEX

Interior plaster shall be applied in accordance with Std. 474. The Finish Coat shall be White Lime Finish - Finish I - Std. 249.

475. INTERIOR PLASTER OVER STEELTEX

Interior plaster shall be applied in accordance with Std. 474. The Finish Coat shall be "No Lime" Finish - Finish II - Std. 250.

476. INTERIOR PLASTER OVER STEELTEX

Interior plaster shall be applied in accordance with Std. 474. The Finish Coat shall be Sand Finish (Job Mix) - Finish III - Std. 252.

476A. INTERIOR PLASTER OVER STEELTEX

Interior plaster shall be applied in accordance with Std. 474. The Finish Coat shall be Sand Finish (Prepared) - Finish IV - Std. 252A.

477. INTERIOR PLASTER OVER STEELTEX

Interior plaster shall be applied in accordance with Std. 474. The Finish Coat shall be Texture Finish - Finish VI - Std. 251.

478. INTERIOR PLASTER OVER STEELTEX

Interior plaster shall be applied in accordance with Std. 474. The Finish Coat shall be Keene Cement - Finish V - Std. 253.

478A. INTERIOR ROUGH COAT PLASTER OVER METAL LATH

Interior rough coat shall be applied in accordance with Std. 248 and 259A (three coat work).

478B. INTERIOR PLASTER OVER METAL LATH

Interior plaster shall be applied in accordance with Std. 478A. The Finish Coat shall be White Lime Finish - Finish I - Std. 249.

478C. INTERIOR PLASTER OVER METAL LATH

Interior plaster shall be applied in accordance with Std. 478A. The Finish Coat shall be "No Lime" Finish - Finish II - Std. 250.

478D. INTERIOR PLASTER OVER METAL LATH

Interior plaster shall be applied in accordance with Std. 478A. The Finish Coat shall be Sand Finish (Job Mix) - Finish III - Std. 252.

478E. INTERIOR PLASTER OVER METAL LATH

Interior plaster shall be applied in accordance with Std. 478A. The Finish Coat shall be Sand Finish (Prepared) - Finish IV - Std. 252A.

478F. INTERIOR PLASTER OVER METAL LATH

Interior plaster shall be applied in accordance with Std. 478A. The Finish Coat shall be Texture Finish - Finish VI - Std. 251.

478G. INTERIOR PLASTER OVER METAL LATH

Interior plaster shall be applied in accordance with Std. 478A. The Finish Coat shall be Keene Cement - Finish V - Std. 253.

479. INTERIOR DOORS - SOFTWOOD

Interior Softwood Doors up to 2'8" x 6'8" shall be installed complete with softwood jamb, backband trim two sides and Hardware in accordance with Stds. 157, 158, 161 and 237.

480. INTERIOR DOORS - HARDWOOD

Interior Hardwood Doors up to 2'8" x 6'8" shall be installed complete with hardwood jamb, backband trim two sides and Hardware in accordance with Stds. 157, 158, 161, 237.

481. CASED OPENINGS - SOFTWOOD

Cased Openings up to 5'10" x 7'0" shall be installed complete with softwood jamb and backband casing for two sides in accordance with Stds. 162 and 163.

482. CASED OPENINGS - HARDWOOD

Cased Openings up to 5'10" x 7'0" shall be installed complete with hardwood jamb and backband casing for two sides in accordance with Stds. 162 and 163.

483. REAR, GRADE OR FRENCH DOOR - SOFTWOOD

Rear or Grade Entrance Door up to 3'0" x 7'0" shall be installed complete with Exterior Door Frame, Exterior Glazed Door (D.S.) 1-3/4" thick, three butts and lockset with non-ferrous exposed parts, softwood backband trim in accordance with Stds. 135, 150, 161 and 237.

484. REAR, GRADE OR FRENCH DOOR - HARDWOOD

Rear or Grade Entrance Door up to 3'0" x 7'0" shall be installed complete with Exterior Door Frame, Exterior Glazed Door (D.S.) 1-3/4" thick, three butts and lockset with non-ferrous exposed parts, hardwood backband trim in accordance with Stds. 135, 150, 161 and 237.

485. ENTRANCE "A" - SOFTWOOD

Front Entrance, Design "A", shall be installed complete with Entrance Frame "A", Door "A", 3'0" x 7'0" x 1-3/4", 3 butts, lockset with non-ferrous exposed parts and softwood backband trim in accordance with Stds. 134, 150, 163 and 237.

486. ENTRANCE "A" - HARDWOOD

Front Entrance, Design "A", shall be installed complete with Entrance Frame "A", Door "A", 3'0" x 7'0" x 1-3/4", 3 butts, lockset with non-ferrous exposed parts and hardwood backband trim in accordance with Stds. 134, 150, 163 and 237.

487. ENTRANCE "F" - SOFTWOOD

Front Entrance, Design "F", shall be installed in accordance with Std. 285 and shall include side lights and softwood backband trim.

488. ENTRANCE "F" - HARDWOOD

Front Entrance, Design "F", shall be installed in accordance with Std. 285 and shall include side lights and hardwood backband trim.

488A. BASEMENT ENTRANCE DOOR

Basement Entrance Door up to 3'0" x 7'0" shall be installed complete with frame, 1-5/8" thick by 6" wide, plank type for masonry construction, rabbetted to receive 1-3/4" door, equipped with brick mold. Frame shall be anchored to the masonry and caulked with J-M Asbestos Caulking Putty. Door shall be hung with three 3-1/2" butts and secured with a non-ferrous lockset.

489. PARTITION - SOFTWOOD

Interior Partitions up to 9'0" high shall be installed complete with studs, 16" c.c. plaster grounds, White Lime Finish Plaster over Steeltex and three member softwood base on two sides in accordance with Stds. 74, 474A and 164.

490. PARTITION - HARDWOOD

Interior Partitions up to 9'0" high shall be installed complete with studs, 16" c.c. plaster grounds, White Lime Finish Plaster over Steeltex, and three member hardwood base on two sides in accordance with Stds. 74, 474A and 164.

490A. SOUTHWESTERN PARTITION CONSTRUCTION

Partitions (Southwestern Construction) shall be installed complete with studs, 1" x 6" D & M Sheathing (2 sides), 1 lb. Felt (2 sides), and three member softwood base.

490B. SOUTHWESTERN PARTITION CONSTRUCTION

Partitions (Southwestern Construction) shall be installed complete with studs, 1" x 6" D & M Sheathing (2 sides), 1 lb. Felt (2 sides), and three member hardwood base.

491. WINDOW FRAME OPENINGS - SOFTWOOD

Window Frame Openings, up to 2'8" x 5'2" shall be installed complete with frame, 6 over 1 sash, sash cord, weights or spring balances, hardware and softwood backband trim in accordance with Stds. 137, 140, 242, 161 and 237.

492. WINDOW FRAME OPENINGS - HARDWOOD

Window Frame Openings, up to 2'8" x 5'2" shall be installed complete with frame, 6 over 1 sash, sash cord, weights or spring balances, hardware and hardwood backband trim in accordance with Stds. 137, 140, 242, 161 and 237.

492A. CASEMENT WINDOW OPENINGS - SOFTWOOD

Casement Window Openings, up to 2'10" x 5'2" shall be installed complete with frame, sash hardware and softwood backband trim in accordance with Stds. 137, 143, 161 and 237.

492B. CASEMENT WINDOW OPENINGS - HARDWOOD

Casement Window Openings, up to 2'10" x 5'2" shall be installed complete with frame, sash hardware and hardwood backband trim in accordance with Stds. 137, 143, 161 and 237.

492C. BASEMENT WINDOW OPENINGS

Basement Windows, up to 2'10" x 1'3", shall be installed complete with frame, sash and hardware in accordance with Stds. 138, 141 and 237.

493. PORCH ENCLOSURE - NEW WORK

Depending on plan or sketch, porch enclosure shall be constructed with masonry foundation, 2" x 8" joists, J-M Home Type "B" Insulation, sub-floor and finish floor, porch bulkheads, columns, roof, ceiling and porch steps.

Either double hung or storm sash may be used for the glazed enclosure. Full length bronze wire screens to reach from top of bulkhead to lintel shall be provided.

The entrance shall consist of a combination door with bronze screen panel and frame, including transom and side lights, exterior and interior paint treatment.

Construction shall be in accordance with the following Trade Standards:

| | | | |
|-----------------------------|----------|-----------------------|----------|
| Trench Excavation | Std. 10 | Porch Bulkheads | Std. 101 |
| Concrete Block Wall and | | " Steps | Std. 102 |
| Cement Plaster - | Std. 20 | " Columns | Std. 99 |
| Concrete Footings | Std. 18 | Double Hung Windows | Std. 492 |
| Porch Floor Joists 2" x 8" | Std. 70 | Storm Sash | Std. 145 |
| Sub Floor Laid Straight | Std. 83 | Full Length Screens | Std. 147 |
| Finish Floor Edge Grain Fir | Std. 121 | Combination Doors | Std. 148 |
| Porch Roof Rafters | Std. 96 | Interior Paint | Std. 281 |
| " Ceiling Joists 2" x 6" | Std. 97 | Exterior Paint | Std. 279 |
| " Ceilings | Std. 98 | Insulation - Type "B" | Std. 243 |
| " Lintel | Std. 95 | J-M Smoothwall | Std. 116 |

494. PORCH ENCLOSURES BUILT ON EXISTING HOMES

The contractor shall inspect the present porch, and depending on its present condition, shall install the enclosure consisting of bulkheads, columns, sash, screens, entrance, insulation, interior and exterior paint, as outlined in Number 494, and selected by the Owner from the Outline Specification in accordance with the following Standards:

| | | | |
|---------------------|----------|-------------------|----------|
| Porch Bulkheads | Std. 101 | Insulation | Std. 243 |
| " Steps | Std. 102 | Smooth Wall | Std. 116 |
| " Columns | Std. 99 | Combination Doors | Std. 148 |
| Double Hung Sash | Std. 492 | Exterior Paint | Std. 279 |
| Storm Sash | Std. 145 | Interior Paint | Std. 281 |
| Full Length Screens | Std. 147 | | |

The first of the great events of the American Revolution was the signing of the Declaration of Independence on July 4, 1776. This document declared the thirteen colonies to be free and independent states, no longer under British rule.

The American Revolution, 1775-1783

The American Revolution was a war for independence that began in 1775 and ended in 1783. It was fought between the thirteen colonies and Great Britain. The war was fought on many fronts, but the most important was the Battle of Yorktown in 1781.

The Battle of Yorktown was a decisive victory for the American forces. It led to the signing of the Treaty of Paris in 1783, which recognized the independence of the United States.

The American Revolution was a turning point in the history of the United States. It established the United States as a free and independent nation. It also led to the development of a new form of government, the Constitution.

The American Revolution was a war of ideas as well as a war of arms. It was a struggle for the principles of liberty, justice, and equality. These principles are the foundation of the United States today.

The American Revolution was a great achievement. It was a war that was fought for a just cause. It was a war that was won by the American people. It was a war that has inspired generations of Americans.

The American Revolution, 1775-1783

| | | |
|------|--|---|
| 1775 | April 19 - Battle of Lexington and Concord | British forces fired the first shots of the American Revolution. |
| 1776 | July 4 - Declaration of Independence | The thirteen colonies declared their independence from Great Britain. |
| 1777 | September 26 - Battle of the Clouds | A tactical draw between British and American forces. |
| 1777 | October 4 - Battle of Red Bank | A British victory that led to the surrender of the fort. |
| 1777 | December 19 - Siege of Fort Mifflin | A British victory that led to the evacuation of the Continental Congress. |
| 1778 | September 26 - Battle of the Clouds | A tactical draw between British and American forces. |
| 1778 | October 4 - Battle of Red Bank | A British victory that led to the surrender of the fort. |
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CONTRACTOR FRANCHISE AGREEMENT AND RECEIPT FOR GUILDWAY CONSTRUCTION STANDARDS

This mutual Agreement made this.....day of.....in the year one
thousand nine hundred and.....between.....

and.....(Guild Contractor Member), hereinafter designated the Contractor; for the purpose of providing a clear understanding of the future relationship between the Guild and the Contractor.

WITNESSETH:—The Guild contemplates offering the Contractor opportunities to supply materials and/or perform services in the future, and as a condition precedent to making such an offer, Contractor agrees preliminarily to conform to the basis hereinafter set forth to govern such possible relationship.

This basis shall hereinafter be known and designated as the Guildway Construction Standards, consisting of the Contract Documents, Part I—the Agreement, Part II—General Conditions, Part III—Specifications, and the Building Trade Standards numbered consecutively from 1 to 494.

It is agreed that nothing herein shall obligate the Contractor to accept such offers nor shall the Guild be obligated to offer such opportunities to the Contractor by reason of their having entered into this Agreement.

The Contractor in consideration of the benefits to be derived, and other lawful considerations, agrees that on all Guild jobs:

1. That these General Conditions and Building Trade Standards shall apply equally to New Home or Home Improvement projects.
2. That he will, before starting any work for any customer of the Guild, subscribe for and carry until completion sufficient coverage in liability and compensation insurance and that the policy number shall be filed at Guild Headquarters.
3. That on Guild generated jobs he will purchase all of the required materials that the Guild Dealer is able to supply.
4. That he will furnish all necessary material and labor required to complete the work in entire accordance with such selected General Conditions and Building Trade Standards which may be entered on and represented in the accepted Agreement.
5. That this compliance shall extend to, and include, all sub-contractors for whose performance (by virtue of engaging them) he may be responsible.
6. That on Guild jobs where plans and specifications are furnished by an Architect and are so described in the Agreement, the Contractor will supply all material and perform all work in full accordance with such plans and specifications modified only to comply with local code, except that where the specifications are less rigid than the Trade Standards for any item affecting structural strength, the appropriate Trade Standards (unless otherwise noted) shall be observed as the minimum specification.
7. That any defective workmanship which may develop within one year after date of completion is his full responsibility and that he will, when notified, promptly correct such defective workmanship without charge.

(Signed)
Guild Dealer Member

(Signed)
Guild Contractor Member

.....
Address

.....
City

CONTRACTOR FRANCHISE AGREEMENT AND RECEIPT
FOR CITYWAY CONSTRUCTION STANDARDS

This Franchise Agreement, made this _____ day of _____, 19____, is by and between

_____ (hereinafter referred to as "Cityway")

and _____ (hereinafter referred to as "Contractor"), parties hereto, who hereby certify that they are duly qualified to enter into the business of _____ and that they are not under any legal disability to do so.

WITNESSETH: That the Contractor has received from Cityway the right to use the Cityway name and to operate a Cityway _____ in the _____ area, and that the Contractor has agreed to pay to Cityway a fee of _____ per month, plus a percentage of the gross sales of the _____.

The Contractor shall maintain the Cityway _____ in the _____ area, and shall comply with the Cityway _____ standards, which are attached hereto as Exhibit A. The Contractor shall also comply with the Cityway _____ standards, which are attached hereto as Exhibit B.

It is agreed that the Contractor shall maintain the Cityway _____ in the _____ area, and shall comply with the Cityway _____ standards, which are attached hereto as Exhibit A. The Contractor shall also comply with the Cityway _____ standards, which are attached hereto as Exhibit B.

The Contractor shall maintain the Cityway _____ in the _____ area, and shall comply with the Cityway _____ standards, which are attached hereto as Exhibit A. The Contractor shall also comply with the Cityway _____ standards, which are attached hereto as Exhibit B.

1. The Contractor shall maintain the Cityway _____ in the _____ area, and shall comply with the Cityway _____ standards, which are attached hereto as Exhibit A. The Contractor shall also comply with the Cityway _____ standards, which are attached hereto as Exhibit B.

2. The Contractor shall maintain the Cityway _____ in the _____ area, and shall comply with the Cityway _____ standards, which are attached hereto as Exhibit A. The Contractor shall also comply with the Cityway _____ standards, which are attached hereto as Exhibit B.

3. The Contractor shall maintain the Cityway _____ in the _____ area, and shall comply with the Cityway _____ standards, which are attached hereto as Exhibit A. The Contractor shall also comply with the Cityway _____ standards, which are attached hereto as Exhibit B.

4. The Contractor shall maintain the Cityway _____ in the _____ area, and shall comply with the Cityway _____ standards, which are attached hereto as Exhibit A. The Contractor shall also comply with the Cityway _____ standards, which are attached hereto as Exhibit B.

5. The Contractor shall maintain the Cityway _____ in the _____ area, and shall comply with the Cityway _____ standards, which are attached hereto as Exhibit A. The Contractor shall also comply with the Cityway _____ standards, which are attached hereto as Exhibit B.

6. The Contractor shall maintain the Cityway _____ in the _____ area, and shall comply with the Cityway _____ standards, which are attached hereto as Exhibit A. The Contractor shall also comply with the Cityway _____ standards, which are attached hereto as Exhibit B.

IN WITNESS WHEREOF, the Contractor has hereunto set its hand and seal, and the Cityway has hereunto set its hand and seal, this _____ day of _____, 19____.

Cityway

Contractor

Cityway

Contractor

CONTRACTOR FRANCHISE AGREEMENT AND RECEIPT FOR GUILDWAY CONSTRUCTION STANDARDS

This mutual Agreement made this.....day of.....in the year one
thousand nine hundred and.....between.....
and.....(Guild Contractor Member), hereinafter designated the Con-
tractor; for the purpose of providing a clear understanding of the future relationship between the Guild and the Contractor.

WITNESSETH:—The Guild contemplates offering the Contractor opportunities to supply materials and/or perform services in the future, and as a condition precedent to making such an offer, Contractor agrees preliminarily to conform to the basis hereinafter set forth to govern such possible relationship.

This basis shall hereinafter be known and designated as the Guildway Construction Standards, consisting of the Contract Documents, Part I—the Agreement, Part II—General Conditions, Part III—Specifications, and the Building Trade Standards numbered consecutively from 1 to 494.

It is agreed that nothing herein shall obligate the Contractor to accept such offers nor shall the Guild be obligated to offer such opportunities to the Contractor by reason of their having entered into this Agreement.

The Contractor in consideration of the benefits to be derived, and other lawful considerations, agrees that on all Guild jobs:

1. That these General Conditions and Building Trade Standards shall apply equally to New Home or Home Improvement projects.
2. That he will, before starting any work for any customer of the Guild, subscribe for and carry until completion sufficient coverage in liability and compensation insurance and that the policy number shall be filed at Guild Headquarters.
3. That on Guild generated jobs he will purchase all of the required materials that the Guild Dealer is able to supply.
4. That he will furnish all necessary material and labor required to complete the work in entire accordance with such selected General Conditions and Building Trade Standards which may be entered on and represented in the accepted Agreement.
5. That this compliance shall extend to, and include, all sub-contractors for whose performance (by virtue of engaging them) he may be responsible.
6. That on Guild jobs where plans and specifications are furnished by an Architect and are so described in the Agreement, the Contractor will supply all material and perform all work in full accordance with such plans and specifications modified only to comply with local code, except that where the specifications are less rigid than the Trade Standards for any item affecting structural strength, the appropriate Trade Standards (unless otherwise noted) shall be observed as the minimum specification.
7. That any defective workmanship which may develop within one year after date of completion is his full responsibility and that he will, when notified, promptly correct such defective workmanship without charge.

(Signed)
Guild Dealer Member

(Signed)
Guild Contractor Member

.....
Address

.....
City

CONTRACTOR FRANCHISE AGREEMENT AND RECEIPT FOR GILBWAY CONSTRUCTION STANDARDS

This Contract Agreement is made this _____ day of _____, 19____

between _____

and _____ (Gilbway Construction Standards), hereinafter referred to as the "Company", for the purpose of providing a franchise relationship between the Company and the Contractor.

WITNESSETH: That the Contractor acknowledges that the Company is the owner of the Gilbway Construction Standards and that the Contractor agrees to pay to the Company a fee for the use of the same and to maintain the same in good and lawful standing.

The Contractor acknowledges that the Company is the owner of the Gilbway Construction Standards and that the Contractor agrees to pay to the Company a fee for the use of the same and to maintain the same in good and lawful standing.

It is agreed that the Contractor shall maintain the Company in good and lawful standing and shall be obligated to offer and maintain the Company in good and lawful standing.

The Contractor is authorized to use the name of the Company in the promotion of its business and to use the name of the Company in the promotion of its business.

That the Contractor shall maintain the Company in good and lawful standing and shall be obligated to offer and maintain the Company in good and lawful standing.

That the Contractor shall maintain the Company in good and lawful standing and shall be obligated to offer and maintain the Company in good and lawful standing.

That the Contractor shall maintain the Company in good and lawful standing and shall be obligated to offer and maintain the Company in good and lawful standing.

That the Contractor shall maintain the Company in good and lawful standing and shall be obligated to offer and maintain the Company in good and lawful standing.

That the Contractor shall maintain the Company in good and lawful standing and shall be obligated to offer and maintain the Company in good and lawful standing.

(Signed) _____

(Signed) _____



